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**Forty-Third Biennial Report  
OF THE  
NORTH CAROLINA  
STATE BOARD OF HEALTH**



**July 1, 1968 — June 30, 1970**

2





**Biennial Report**

**The North Carolina State Board of Health**



**Forty-Third Biennial Report  
OF THE  
NORTH CAROLINA  
STATE BOARD OF HEALTH**



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**July 1, 1968 — June 30, 1970**



JACOB KOOMEN M.D. M.P.H.  
STATE HEALTH DIRECTOR  
AND SECRETARY TREASURER



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ASSISTANT STATE HEALTH DIRECTOR

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Asheville  
Leroy C. Beyer, M.D.  
Vice President  
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New Bern  
Ben W. Dewsey, D.V.M.  
Gastonia

Lucien E. Ham, Jr., M.D.  
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J. M. Mackey  
Wilderhe  
Paul F. Marrett, M.D.  
Durham  
Ernest A. Raderman, Jr., B.S.  
Mount Airy  
Jesse H. Meredith, M.D.  
Winston-Salem

NORTH CAROLINA  
STATE BOARD OF HEALTH  
P O BOX 2091  
RALEIGH, NORTH CAROLINA 27602

March 14, 1971

The Honorable Robert W. Scott  
Governor of the State of North Carolina  
The State Capitol  
Raleigh, North Carolina

Dear Governor Scott:

In accordance with the General Statutes of North Carolina, Chapter 130, Article 2, Section 130-11(12), I have the honor to submit to you, and through you to the Honorable Senate and House of Representatives, the biennial report of the North Carolina State Board of Health for the fiscal years July 1, 1968, to June 30, 1970.

Very truly yours,

*Jacob Koomen*

Jacob Koomen, M.D., M.P.H.  
State Health Director



## CONTENTS

Letter of Transmittal .....	v
State Board of Health Members and Executive Staff .....	ix
Organization Chart .....	x
Local Health Directors .....	xi
Report of Secretary-Treasurer and State Health Director	
Abridged Minutes of State Board Actions	
Sept. 19, 1968—page 1; Feb. 13, 1969—page 8;	
May 21, 1969—page 19; Dec. 4, 1969—page 21;	
March 18, 1970—page 28; May 20, 1970—page 34;	
Conjoint Reports	
May 21, 1969 .....	39
May 20, 1970 .....	50
Division Reports	
Administrative Services Division .....	56
Division of Epidemiology .....	61
Laboratory Division .....	76
Community Health Division .....	85
Dental Health Division .....	98
Personal Health Division .....	100
Sanitary Engineering Division .....	110





# **NORTH CAROLINA STATE BOARD OF HEALTH**

(Nine member policy-making body, five members appointed by the Governor and four members elected by the Medical Society of the State of North Carolina, each serving a four-year term.)

## **Members Appointed by the Governor**

**Lenox D. Baker, M.D.,** Vice President  
Appointed 1956  
Term expires 1973

**Charles T. Barker, D.D.S.**  
Appointed 1969  
Term expires 1973

**Ben W. Dawsey, D.V.M.**  
Appointed 1959  
Term expires 1971

**J. M. Lackey**  
Appointed 1965  
Term expires 1973

**Ernest A. Randleman, Jr., B.S. Ph.**  
Appointed 1967  
Term expires 1971

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**James S. Raper, M.D.,** President  
Elected 1963  
Term expires 1971

**Joseph S. Hiatt, Jr., M.D.**  
Elected 1965  
Term expires 1973

**Paul F. Maness, M.D.**  
Elected 1967  
Term expires 1971

**Jesse H. Meredith, M.D.**  
Elected 1969  
Term expires 1973

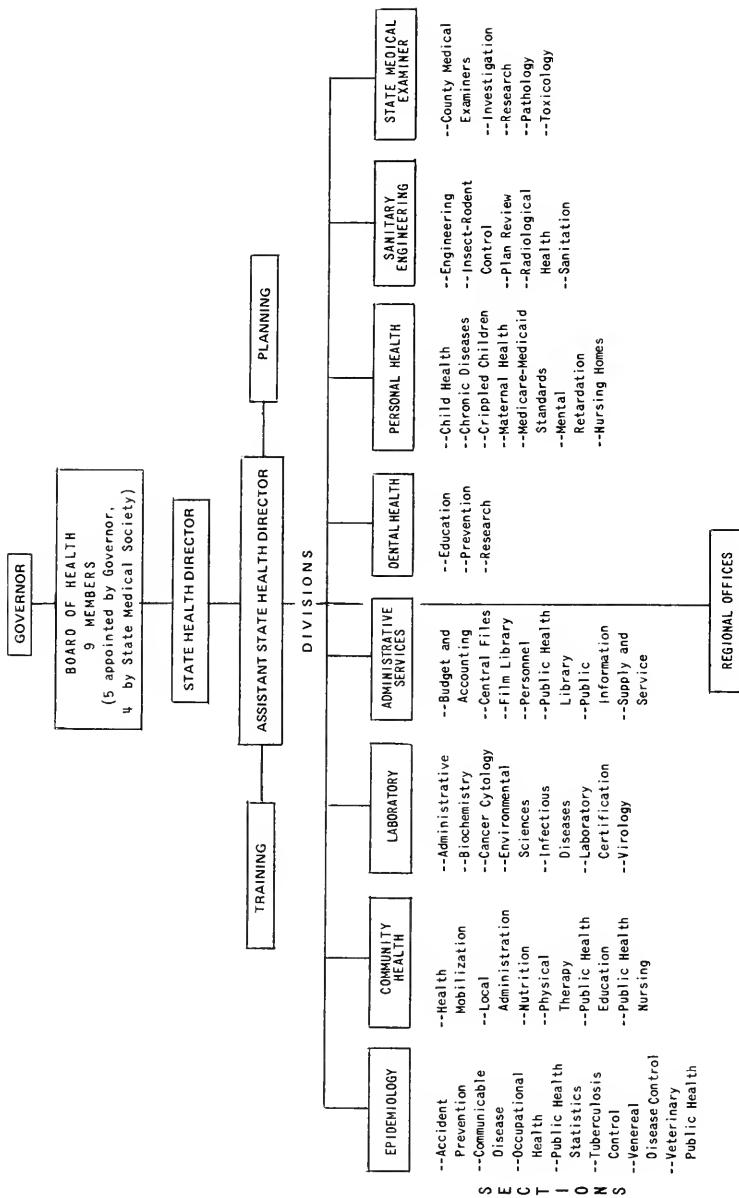
## **EXECUTIVE STAFF AS OF JUNE 30, 1970**

**Jacob Koomen, M.D., M.P.H.**  
Secretary and State Health Director  
(Term expires June 30, 1971)

**W. Burns Jones, Jr., M.D., M.P.H.**  
Assistant State Health Director  
(Term concurrent with the State Health Director)

**Ben Eaton, LL.B.,** Director, Administrative Services Division  
**Martin P. Hines, D.V.M., H.P.H.,** Director, Epidemiology Division  
**Marshall Staton, B.C.E., M.S.S.E.,** Director, Sanitary Engineering Division  
**Ronald H. Levine, M.D., M.P.H.,** Director, Community Health Division  
**Lynn G. Maddry, Ph.D., M.S.P.H.,** Director, Laboratory Division  
**E. A. Pearson, Jr., D.D.S., M.P.H.,** Director, Dental Health Division  
**Theodore D. Scurletis, M.D.,** Director, Personal Health Division  
**R. Page Hudson, Jr., M.D.,** Director, Medical Examiner Division

# NORTH CAROLINA STATE BOARD OF HEALTH ORGANIZATION CHART



# NORTH CAROLINA STATE BOARD OF HEALTH

## Local Health Directors

- Alamance**—Dr. W. L. Norville, Graham-Hopedale Road, Burlington, N. C. 27215 — (919) 227-7451 or 228-9502
- Alleghany-Ashe-Watauga\***—Mr. Carl Tuttle, P. O. Box 233, Boone, N. C. 28607 —(704) 267-2126
- Anson**—P. O. Box 473, Wadesboro, N. C. 28170 (704) 694-2516
- Avery**—P. O. Box 325, Newland, N. C. 28657 (704) 733-4971
- Beaufort**—Dr. Karl L. Van Horn, Harvey St., Washington, N. C. 27889—(919) 946-3101 or 946-3102
- Bertie**—P. O. Box 586, Windsor, N. C. 27983 (919) 794-2057
- Bladen**—Dr. Caroline Callison—P. O. Box 188, Elizabethtown, N. C. 28337—(919) 862-2536 or 862-2537
- Brunswick**—Dr. J. R. Black, P. O. Box 398, Southport, N. C. 28461 (919) 457-2081 or 457-6655; Shallotte, N. C. 28459—(919) 754-6611
- Buncombe**—Dr. H. W. Stevens, Dr. Irma H. Smathers, Asistant Director, P. O. Box 7607, Courthouse, Asheville, N. C. 28807—(704) 252-7611, Ext. 242
- Burke**—Dr. G. F. Reeves, P. O. Box 945, Morganton, N. C. 28655—(704) 437-5152
- Cabarrus**—Mr. Albert J. Klimas, P. O. Box 1149, Concord, N. C. 28025—(704) 782-4121
- Caldwell**—Dr. Marjorie Strawn, P. O. Box 777, Lenoir, N. C. 28645—(704) 758-2379
- Carteret**—Dr. Luther Fulcher, P.T., Drawer B, Beaufort, N. C. 28516 (919) 728-4557
- \*Catawba-Lincoln-Alexander**—Dr. Melvin F. Eyerman, P. O. Box 1448, Hickory, N. C. 28601—(704) 328-2561
- \*Cherokee-Clay-Graham**—P. O. Box 309, Murphy, N. C., 28906—(704) 837-2311
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- Columbus**—Dr. John R. Black, P. O. Box 786, Whiteville, N. C. 28472—(919) 642-4145 or 642-4146
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- Edgecombe**—Dr. J. S. Chamblee, 2909 Main St., Tarboro, N. C., 27886—(919) 823-2174 or 823-2175
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- Franklin**—Dr. J. B. Wheless, P.T., P. O. Box 300, Louisburg, N. C., 27549—(919) 496-3553
- Gaston**—Dr. B. M. Drake, 615 N. Highland St., P. O. Box 819, Gastonia, N. C., 28052—(704) 864-4331
- Granville**—Dr. J. U. Weaver, P. O. Box 367, Oxford, N. C., 27565—(919) 693-7618
- Greene**—Dr. Joseph L. Campbell, P. O. Box 67, Snow Hill, N. C., 28580—(919) 747-3578

**Guilford**—Dr. Sarah Morrow, 300 E. Northwood St., Greensboro, N. C., 27401 (919) 275-0911

**Halifax**—Dr. Leslie G. Hoag, P. O. Box 178, Halifax, N. C., 27839—(919) 583-2191

**Harnett**—P. O. Box 36, Lillington, N. C., 27546—(919) 893-3425; 904 Edgerton St., P. O. Box 491, Dunn, N. C., 28334—(919) 892-2424

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**Iredell**—Dr. J. H. Nicholson, Acting, 735 Hartness Road, P. O. Box 1268, Statesville, N. C., 28677—(704) 873-7271; Mooresville, N. C.—(704) 663-1271

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**Nash**—Dr. J. S. Chamblee, P. O. Box 497, Nashville, N. C., 27856—(919) 459-2158

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**(CITY DEPARTMENT) Rocky Mount**—Dr. J. S. Chamblee, 1616 W. Thomas St., Rocky Mount, N. C., 27801—(919) 442-5181, Ext. 270

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**Chatham**—Dr. O. David Garvin, Dr. C. S. Fuller, Asst., Dr. Robert L. Wood, Asst., Pittsboro, N. C. 27312—(919) 542-2924

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**Chowan**—P. O. Box 178, Edenton, N. C., 27932—(919) 482-2511

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**Gaston**—Dr. B. M. Drake, Cherryville, N. C., 28021—(704) 435-6411

**Gaston**—Dr. B. M. Drake, Belmont, N. C. 28012—(704) 825-2178

**Gates**—Dr. Quinton E. Cooke, P. O. Box 71, Gatesville, N. C., 27938—(919) 357-6141

**Graham**—Robbinsville, N. C. 28771—(704) 479-3525

**Guilford**—Dr. Sarah T. Morrow, 936 Montlieu Avenue, High Point, N. C., 27262—(919) 883-9166

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**Polk**—Dr. T. F. Hahn, Jr., P. O. Box 95, Walker Street, Columbus, N. C., 28772—(704) 894-8271

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**Swain**—P. O. Box 546, Bryson City, N. C., 28713—(704) 488-2586

**Tyrrell**—P. O. Box 237, Columbia, N. C., 27925—(919) 796-2681

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**Yadkin**—Mr. Alton Brown, Shacktown Road, P. O. Box, Yadkinville, N. C., 27055—(919) 679-2252

## REGIONAL OFFICES

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Greenville, N. C., 27834  
(919) 756-1343

Hickory Regional Office  
Northwestern Bank Building  
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P. O. Box 1356  
Hickory, N. C. 28601  
(704) 328-5341

Raleigh Regional Office  
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Raleigh, N. C., 27602  
(919) 829-7413

Southeastern Regional Office  
310-314 Grace Pittman Building  
Fayetteville, N. C., 28301  
(919) 483-3635 or 483-3636

Western Regional Office  
N. C. State Board of Health  
Biltmore Plaza Office Building  
Asheville, N. C., 28803

## **REPORT OF THE SECRETARY-TREASURER AND STATE HEALTH DIRECTOR**

**ABRIDGED REPORT OF THE ACTIVITIES OF THE STATE  
BOARD OF HEALTH AS RECORDED IN THE MINUTES**

**Thursday, September 19, 1968**

The North Carolina State Board of Health held its Fall quarterly meeting at the Lake Logan Lodge, Canton, North Carolina, Thursday, September 19, 1968, 10:00 a.m. to 12:30 p.m. Dr. James S. Raper, President presided.

Attending: **James S. Raper, M.D., President**  
**A. P. Cline, Sr., D.D.S.**  
**Ben W. Dawsey, D.V.M.**  
**J. M. Lackey**  
**Paul F. Maness, M.D.**  
**Howard Paul Steiger, M.D.**

Absent: **Lenox D. Baker, M.D., Vice-President**  
**Joseph S. Hiatt, Jr., M.D.**  
**Ernest A. Randleman, Jr., B.S.Ph.**

Staff members present included: Dr. Jacob Koomen; Dr. W. Burns Jones, Jr.; Dr. Martin P. Hines; Dr. E. A. Pearson, Jr.; Mr. Marshall Staton, Mr. John Andrews; and Mrs. Doris P. Sitterson.

Dr. Raper called the meeting to order, inviting Dr. Maness to give the Invocation. Since a copy of the May 15, 1968, board minutes was sent to each Member of the Board for review, Dr. Cline moved their approval without correction. Dr. Dawsey seconded the motion and the Minutes were unanimously approved.

Each Board Member received through the mail for review a complete copy of the proposed revision of the **Regulations and Disease Control Measures of the North Carolina State Board of Health Governing the Control of Communicable Diseases**. Dr. Raper called on Dr. Hines for comments with regard to the proposed changes. Dr. Hines indicated these Regulations have not been republished since 1944; and that there had been no amendments since 1959. It was brought out that the American Public Health Association's publication "Control of Communicable Disease in Man" was used as a reference and guide. Dr. Hines discussed the format of the Regulations and answered general questions from the Board. Dr. Maness indicated he had gone over the Regulations very carefully, commending the staff for the excellent and thorough job they had done in preparing the proposals and moved that **The State Board of Health approve the revision and republication of the regulations and disease control measures of the North Carolina State Board of Health governing the control of communicable disease, that copies be fully distributed throughout the**

state and that said regulations carry an effective date of January 1, 1969. Dr. Steiger seconded the motion.

Before voting on the motion, Dr. Raper called for a Public Hearing on the Communicable Disease Regulations. No one requesting to appear, Dr. Raper instructed the secretary to let the minutes show that no member of the public has requested hearing upon this matter.

The motion made by Dr. Maness was given unanimous approval.

Noting the Board Meeting location, Asheville, on certain of the printed items, Dr. Cline respectfully requested each of these documents be corrected to indicate the location of the Board Meeting as Canton, North Carolina. This request was granted by common consent.

Dr. Raper told the Board he had been contacted by the Honorable Marshall A. Rauch, North Carolina State Senator, with regard to a portion of the State Board of Health's budget being allocated to a fluoridation program. Dr. Raper called on Dr. Pearson for present status remarks on the fluoridation program within the State. Each Board Member was furnished a written copy of the fluoridation report and a copy is attached to the official Minutes. Following Dr. Pearson's review of this report, Dr. Cline moved that **The State Board of Health go on record in support of the State Board of Health's Dental Health Division program for statewide fluoridation and in support of the budget proposed for this purpose.** Dr. Dawsey seconded, and the motion carried unanimously.

Mr. Staton presented to the Board a resolution requesting the creation of the Southwest Jacksonville Sanitary District located in Onslow County, North Carolina. It was pointed out that this resolution brings to completion a five-to-six year campaign by interested persons in the Jacksonville area for creation of this District. The area involves some 5,000 acres. Mr. Staton indicated that the required public hearing, petitions, documents and authorization from the Attorney General's Office were all in order. He recommended favorable action by the Board. Dr. Rawsey moved **that the State Board of Health approved the resolution for creating the Southwest Jacksonville Sanitary District in Onslow County, North Carolina.** Dr. Cline seconded the motion. Dr. Raper called for any comments from the public, there being none, he directed the secretary to let the minutes show that no member of the public has requested hearing upon this matter. The motion was given unanimous approval.

The next item of business was the resolution requesting the extension of the boundary lines of the Haw River Sanitary District in Alamance County. This extension includes the property of one owner



who has petitioned the Board of Commissioners of the Sanitary District requesting that the proposed territory be annexed. Since 100% of the property holders signed the petition and all legal transactions are in order, Mr. Staton recommended approval by the Board. Dr. Maness moved **that the State Board of Health approve the extension of the boundary lines of the Haw River Sanitary District located in Alamance County, North Carolina.** Dr. Cline seconded the motion. On call for public comment, the President directed the secretary to let the minutes show that no member of the public has requested hearing upon this matter. The motion was given unanimous approval.

Mr. Andrews was called on to present to the Board the proposed Rules and Regulations Governing the Sanitation of Local Confinement Facilities. He explained that the Regulations were developed by the State Board of Health staff, with the assistance of an Ad Hoc Committee of local sanitarians, and in cooperation with the State Department of Public Welfare. The Board of Public Welfare has adopted Regulations on other aspects of local confinement facilities, and ours apply only to "Sanitation and Food". Section 53.4 of Chapter 153 of the General Statutes stipulates that both Boards adopt regulations and spelled out a cooperative program, with Welfare having primary responsibility. Under the proposed regulations, local sanitarians would inspect each facility at least once a year, and classify each facility as Approved, Provisional or Disapproved. Any enforcement action would be the responsibility of the Department of Public Welfare. In reviewing the Regulations with the Board, Mr. Andrews noted one correction to the Board Members' printed copy, that being on page 2, under **note**, line two, the word "**Revisions**" should read "**Provisions**". After discussion, Dr. Dawsey moved **that The State Board of Health approve the rules and regulations governing the sanitation of local confinement facilities and further stipulate January 1, 1969, as the effective enforcement date for said regulations.** Dr. Steiger seconded the motion. No member of the public requesting to be heard, the Board gave unanimous approval to the motion.

The Board was asked to approve the deletion of the requirement for health certificates for employees from the Rules and Regulations Governing the Sanitation of Hotels, Motels, Inns, Tourist Homes and other Lodging Places. It was felt by the staff that the public health necessity for such certificates was minimal. Dr. Dawsey moved **that The State Board of Health approve the deletion of Health Certificate requirements for employees under the rules and regulations governing the sanitation of lodging establishments, effective January 1, 1969.** Dr. Cline seconded the motion. No member of the public desiring to be heard, the Board gave unanimous approval to the motion.

Mr. Andrews next presented a revision to the Rules and Regulations Governing the Sanitation of Restaurants and other Foodhandling Establishments. This was with regard to Shellfish. A copy of the change is attached to the Minutes. Dr. Dawsey moved **that The State Board of Health approve revision of item 16 (c) Shellfish, indicating an effective date of January 1, 1969.** Mr. Lackey seconded the motion. No member of the public indicating a desire to be heard, the Board gave unanimous approval to the motion.

A resolution for extending the boundary lines of the Kannapolis Sanitary District located in Cabarrus and Rowan Counties was presented by Mr. Staton. Dr. Cline, pointing out that each Board Member had reviewed the proposal, moved **that The State Board of Health approve the extension of the boundary lines of the Kannapolis Sanitary District located in Cabarrus and Rowan Counties, North Carolina.** Dr. Dawsey seconded the motion. Dr. Raper called for any comment from the public, there being none, the motion was unanimously approved.

Amendments to the Public Water Supply Regulations were proposed. Mr. Staton indicated the need for having closer supervision and control over public water supplies because of the increase in population on watersheds of public water supplies. The proposed changes are spelled out in the attached copy. Dr. Dawsey moved **that The State Board of Health approve the proposed amendments to the Public Water Supply regulations for the purpose of extending coverage to septic tank systems on public water supply watersheds, to be made effective thirty days following this meeting.** Dr. Steiger seconded the motion. Dr. Raper requested comment from any member of the public wishing to be heard. Since no one appeared, the Board gave unanimous approval to Dr. Dawsey's motion.

Mr. Staton presented proposed changes to the Rules and Regulations Governing State Aid to Mosquito Control Districts or Other Local Governmental Units Engaged in Mosquito Control Undertakings. The changes are attached to the official minutes, but in essence merely bring all allocated funds under one category. This change will simplify the monetary aspects of the Mosquito Control Program. Dr. Dawsey moved **that The State Board of Health approve the proposed amendments to the rules and regulations governing State Aid to Mosquito Control Districts or other local governmental units engaged in Mosquito Control undertakings.** Mr. Lackey seconded the motion. No public hearing having been requested, the motion was approved.

Dr. Raper commented on the proposed revisions to the Rules and Regulations for the Licensing of Nursing Homes. He pointed out that we now have a set of Regulations that we have been following since

their last revision in 1967. At the October Board Meeting, these Regulations were discussed, at which time they were referred for study to the staff of the State Board of Health. Dr. Baker has been interested in these Regulations and has recommended certain changes. "Out of deference to Dr. Baker, I would like it to be noted that the Chair feels that these Regulations should be tabled until a later time as it will not affect in any way the present Nursing Home situation. We have all had these proposed changes for study and we too may have changes in mind. We should all spend some time in the near future on them so that at the next meeting of the Board we can have some good discussion. The next meeting will be sometime in early December." Dr. Steiger moved **that The Nursing Home Regulation Revisions be tabled for consideration at the next board meeting.** Dr. Maness seconded that motion and it carried.

Dr. Raper complimented the State Board of Health staff for the efficient manner in which the material for the meeting had been prepared. He then called on Dr. Koomen to bring the Board up-to-date on a number of items.

**Breathalyzer** — Dr. Koomen reported to the Board that the State Board of Health in its responsibility for issuing permits to Breathalyzer operators had since 1964 issued 536. Sixty of that number have expired and not been renewed. About 170 of the 536 permits are assigned to State Highway Patrolmen. The remainder are held by 61 agencies and departments. During the month of August, 1215 individuals were checked by the Highway Patrol. A total of 16,000 cases have been checked by the State Highway Patrol during the time they have been involved in this program. Drivers examined in August, 1968, number 187% higher than two years ago, and 97% higher than one year ago. A suspected driver must first be cited then given the test. About 25% of those asked to take the test refuse.

**Space** — Dr. Koomen pointed out that the State Board of Health now fills space in six of the nine buildings on Caswell Square in Raleigh. Further it is anticipated that we shall need to have expansion of building, plans and programs in the near future.

**Fluoridation** — "Nowhere does the public get so much for its money as in the fluoridation of water supplies", commented Dr. Koomen. Sixty to sixty-five percent reduction in cavities result where supplies have been fluoridated.

**Non-medical Administrators** — Dr. Koomen pointed out the shortage of physicians in our society. A few young physicians are being added to the group interested in public health. More and more it be-

comes evident that the future will demand the non-medical administrator. We have one presently employed in Cabarrus and one in the northeastern section of the State. These men possess a strong administrative background and a degree of Master of Public Health. They have been able to do some things that the physician could not do. The public health administrator is equally steeped in all problems of a community, not just the medical aspects.

**Medical Review Board** — Dr. Koomen mentioned that the Review Board, whose membership was appointed by the President of our Board October 12, 1967, is moving along very well.

**Name Change** — With regard to the name of the State Board of Health — policy body and agency — it was brought out that many states have identified the two for clarification of responsibility. Dr. Koomen stated, "We now have confusion as to whether certain laws refer to the 'policy-making group' or to the Agency staff. We have had preliminary investigation into this. From an administrative point of view, clarity as to the Board or Staff would make our work much easier. To date there are some 2400 mentions of 'the State Board of Health', 'the State Department of Health', and several other incorrect titles, within the Public Laws of North Carolina. We have consulted with the Institute of Government to determine what would be involved in making a complete search of the law. The Institute estimates an expenditure of \$750 would be incurred to clarify names, probable responsibilities, etc."

**Statewide Medical Examiners System** — Dr. Koomen told the Board, "We have had a Postmortem System for about fourteen years in which counties that wished to might come under the Medical Examiner System. Altogether the maximum number of counties which came under this were fourteen or fifteen. They were permitted use of the Toxicological Laboratory at the University of North Carolina at Chapel Hill. Dr. Kenneth Brinkhous served as Secretary to the System, and the State Health Director served as Chairman. Some counties operated under a local system. The last General Assembly passed an act for a Statewide Medical Examiner System and monies were appropriated for this. Dr. Page Hudson, the new Chief Medical Examiner, joined us on September 1, 1968. We will need additional funds for this and additional staff. You voted in an earlier meeting to move this physical operation to Chapel Hill where they will have building space and the use of the Toxicological Laboratory."

**Driver's License Medical Information** — The new licenses carry a colored picture of the operator plus the addition of medical information on the back. The reason for this added medical information is

obvious since it could mean the difference between life and death in case of an accident.

**Budget** — Dr. Koomen reported that the staff had appeared once before the Advisory Budget Commission. There are many health agencies in the State, each with many responsibilities and monetary requirements. The total health expenditure in North Carolina is in the neighborhood of 1.1 billion dollars. We have been very well received by the Advisory Budget Commission. We had an expansion of over 30% during the last biennium. This year there was an invitation to talk about our problems and our objectives, not only in terms of money, before the Commission. Attached to the official Minutes is a copy of our "B" Budget proposals which Dr. Koomen presented to the Board.

There were general comments and questions from the Board. Dr. Raper encouraged each Member to study the proposal carefully and make individual views known to Dr. Koomen.

As to the discussion of the name change, Dr. Raper indicated he agreed with the staff in that there is a need for clarification of responsibilities. He further stated his feeling that the study should be continued and the results reported back to the Board. "What is your direction to Dr. Koomen and his staff with regard to this name change proposal?"

Dr. Koomen stated that certain of the preliminary procedures had already been conducted and computerized by the Institute of Government; and that the estimated cost to complete the study would be \$750. Dr. Raper then asked each Member of the Board to state his feelings, particularly since the Board is being asked to authorize this expenditure.

Dr. Maness indicated he felt this would be a good thing to do and approved going ahead with the study.

Dr. Dawsev moved **that The Study of Change of Name for the State Board of Health be continued by the Institute of Government and that funds be made available to cover expenses incurred so that recommendations can be made specifically to the Board for its adoption.** Mr. Lackey seconded the motion, and it was unanimously approved.

With regard to the "B" Budget, Dr. Maness moved **that The Board go on record in support of the "B" Budget as outlined in Dr. Koomen's remarks and report with the understanding that it may be necessary to make certain changes at a later time due to implementation of certain other programs.** Dr. Cline seconded and the motion carried.

There being no further business to come before the Board, the meeting was adjourned.

**MINUTES**  
**NORTH CAROLINA STATE BOARD OF HEALTH**

**Thursday, February 13, 1969**

The North Carolina State Board of Health held its Winter quarterly meeting in the Board Room of the Cooper Memorial Health Building, Raleigh, North Carolina, Thursday, February 13, 1969, at 1:00 P.M. Dr. James S. Raper, president, presided.

Attending:    **James S. Raper, M.D., President**  
                  **Lenox D. Baker, M.D., Vice-President**  
                  **A. P. Cline, Sr., D.D.S.**  
                  **Ben W. Dawsey, D.V.M.**  
                  **Joseph S. Hiatt, Jr., M.D.**  
                  **J. M. Lackey**  
                  **Paul F. Maness, M.D.**  
                  **Ernest A. Randleman, Jr., B.S.Ph.**  
                  **Howard Paul Steiger, M.D.**

In addition to the Board, several Staff members and members of the news media were present.

The President called the meeting to order, inviting Dr. Hiatt to deliver the invocation.

Dr. Raper then asked Mr. Marshall Staton, Assistant Director, Sanitary Engineering Division, to brief the Board on circumstances surrounding the appeal today by Mr. W. L. Beamon, Burlington, relative to properties located on the High Point Watershed.

Mr. Staton indicated Mr. Beamon's situation had resulted since the last meeting of the Board when amendments to the public water regulations extending coverage to septic tank systems located on public water supply watersheds had been approved. These amendments dealt directly with the size of lots on watersheds and were restricted because of the continuing increase in population density where septic tanks are used in these particular areas. The regulations were adopted to further strengthen the position of the Local Health Department and to protect the health of the general public following requests from planning agencies and from the Executive Committee of the Board of Trustees of the University of North Carolina. The General Statutes 130-163 authorize the State Board of Health to set such controls to provide adequate protection to public water supplies. It is on the question of lot size that Mr. Beamon wishes to appear before this Board and state his case.

Mr. W. L. Beamon said, "I certainly appreciate the opportunity to talk with you gentlemen. I do think it is important and I would like to explain to you my situation and I think it's pretty much like this all over the State. I would like to let you know why I feel qualified to speak to this point. I have served as Chairman of the County Commissioners and I am now serving on the Health Board and have for several years. I think Dr. Norville will tell you that I am as concerned as any citizen about our water supply. I am in the real estate and building business. I have installed 160 septic tanks in the last fifteen or sixteen years; therefore, I have experience in that line. Sometimes you may have over-enthusiastic planning in a community! My concern is that there is a blanket rule requiring 40,000 square feet per lot with septic tanks built on watersheds. This, gentlemen, is the rule from Manteo to Murphy, regardless of the land. If my experience means anything, if a septic tank won't work in 20,000 feet you might as well give it up, because it won't work anywhere.

The rule authorizes you to regulate these requirements up but it doesn't allow for any decrease even if the conditions justify it. The one ingredient that makes the septic tank work is the soil. If the soil is not right, it won't work! It has to have soil that will percolate or it won't work. Twenty thousand square feet has been accepted and has worked for years. It's accepted by the FHA, the GI and many others. They say that's not crowding. My situation is this — the primary reason I'm here — I don't think it's fair to the people. You're making a hardship on those who don't deserve it.

I'm handling an estate of 100 acres between Guilford and Jamestown. We have already developed 75 acres. And the first septic tank has not given trouble on the 20,000 feet required lot. These were installed before this rule was made and the rule does not affect tanks already installed. Mr. Braughler, of the Guilford County Health Department, agreed with me that the soil is good in that area of the County. The tanks do work and that 75 acres I've already developed proves it. The only reason for this rule is to keep the streams clean. In an area that's four-and-a-half miles from the reservoir and works — not a one giving trouble — and I have a sale for this 23 acres which will complete the 100 acres.

There is concern about this lot size requirement on the part of the prospective buyer, and I can't blame him for his concern. If this was presenting a hazard to the reservoir, gentlemen, I wouldn't be here. If you wanted to take care of a few trailers in Chapel Hill, that's one thing. Your County Health Officers can determine what should be done in a particular area or situation. Make the 20,000 minimum and

let the Health Director use his judgment in making a decision as to whether it can be done or not. Blanket rule on such a requirement is not fair because you disregard the condition of the soil completely. You can do this, you can get comparisons with other areas — California, Charlotte, etc. — but I think the problem here is to use discretion and reason. This is what I'm asking you.

I'm going to drive back to Alamance County in an hour or so. Some people will be given a ticket during that time. If I'm not speeding, I don't expect to be given a ticket. My land has been plotted and is on record and on the tax office books. The man that wants to buy this property would like to make lots if he can make their size 20,000 and leave to the Health Officer to determine that that would be fair. Seventy-five acres is now developed and working. Why not let me develop the last 23 acres of my land?"

Mr. Lackey asked the size of the present lots.

Mr. Beamon indicated the 75 acres of lots were in the 20,000 to 22,000 feet range with none under 20,000. "This property sells for \$3000 to \$3500 per lot. The 75 acres is working. You won't find one that is not working. There will be cases come up over the State, and I feel that this should be left to the discretion of the Health Officer. I know that they do a good job."

Mr. Randleman asked the lot dimensions.

Mr. Beamon indicated the lots to be approximately 100 by 130. All the lots are different.

Dr. Raper asked if this rule only affects watersheds.

Mr. Staton said, "We took a minimum of 40,000 feet to be suitable for septic tank systems on small watersheds, not to large sheds."

Mr. Beamon, "When you say near watersheds, that could be fifteen or twenty miles. Gentlemen, this land that we're speaking of now is four miles from the water reservoir, and does not in any way do damage to the water supply."

Mr. Randleman asked if the Health Department is to draw up plans where a septic tank should be on a lot, that he had put one in himself.

Mr. Beamon, "The point is, gentlemen, that if it doesn't work on 20,000, it's not going to work on 40,000. Gentlemen, I am just as concerned as anybody about this. You let people go out in the reservoir for recreational purposes — swimming, boating, etc. What inspection do you make on that. You allow stock to come down and drink from



the water. You allow things that questionable, but you won't allow something that has proved it's no hazard. It's just not fair!"

Dr. Raper thanked Mr. Beamon for coming and bringing this situation to the Board's attention. "If necessary we will go to all other agencies in this State and find out what is proper. If the law needs to be changed, we will take such steps. We will certainly look into this situation very carefully."

Mr. Beamon, "I would like to ask permission to sell this property under the same conditions and regulation requirements as the other 75 acres."

Dr. Baker moved **that the division concerned with the matter check with the Department of Air and Water Resources and other concerned agencies and come back with a recommendation to this Board for further action.** The motion was seconded by Dr. Steiger and unanimously passed.

Dr. Maness added the fact that Mr. Beamon is now serving as the Mayor of Burlington. Dr. W. L. Norville, Alamance County Health Director, was present and indicated that Mr. Beamon had been a strong leader in Alamance County for the septic tank ordinance. At this point, Dr. Norville and Mr. Beamon excused themselves.

Dr. Raper reminded the Board Members that the Minutes of September 19, 1968, had been distributed by mail. Dr. Dawsey moved **the minutes be approved as circulated.** Dr. Hiatt seconded the motion, and it passed unanimously.

The Board's attention was then directed to reconsideration of the Nursing Home Regulations. Dr. Raper commented briefly on the extensive amount of material involved, whereupon Dr. Baker made the motion **that Dr. Raper appoint a committee from the Board to go over the proposed amendments to the rules and regulations for the licensing of Nursing Homes, item by item, with the "staff" and present to the Board their recommendations.** The motion was seconded by Mr. Randleman and unanimously approved.

Mr. Randleman suggested that the staff check on **Section III, D.4.d.** with Mr. H. C. McAllister, Secretary-Treasurer of the North Carolina Board of Pharmacy, to see if unused narcotic drugs for a patient had to be sent to the Narcotic District Supervisor.

Mr. Poole discussed the new Nursing Home Administrators Licensing Act as required under Section 1908 of the Social Security Act as amended in the 90th Congress. The proposed law as developed by

the Institute of Government, using the HEW Model Bill as a guideline. Representatives of the North Carolina Association of Nursing Homes, North Carolina Association of Non-Profit Homes and the State Board of Health worked jointly with the Institute of Government in developing a bill to be presented to the General Assembly for action. Dr. Raper recommended that the proposed bill be circulated to the Board Members so that they could review it and return their comments and recommendations before the bill was presented to the General Assembly.

Dr. Baker made a motion **that the proposed committee assigned to review the amendments to the rules and regulations for the licensing of Nursing Homes, at the same time, discuss the rules and regulations for the operation of combination Nursing Homes and Boarding Homes for the aged and infirm with the staff and bring their recommendations to the board at its next meeting.** The motion was seconded by Mr. Randleman and carried.

The next item for discussion was the proposed amendment to the Rules and Regulations governing the disposal of sewage from any residence, place of business or place of public assembly. Mr. J. M. Jarrett, Director, Sanitary Engineering Division, was asked to comment. In his explanation, Mr. Jarrett indicated the amendment was primarily to define certain terms that were left out of the original laws through an oversight. Since the additions are for matters of clarification, Dr. Dawsey moved **that the State Board of Health approve the changes in the rules and regulations governing the disposal of sewage from an residence, place of business or place of public assembly in North Carolina as outlined.** The motion was seconded by Dr. Baker. Dr. Raper asked if any member of the public desired to be heard. No one making such a request, the secretary was instructed to so indicate in the minutes. The motion was passed. A copy of the approved amendment is included with the official minutes. Dr. Baker moved **the Board thank Mr. Jarrett for his "usual good job".** The motion was approved by common consent.

Mr. Ben Eaton, Director, Administrative Services Division, was called on to present to the Board a proposed Amendment to the Breath Alcohol Test Regulations. It was brought out that this amendment was suggested by the Attorney General's Office simply to make more explicit the method of taking tests by incorporating express language the procedures set forth in the manufacturer's manual. Here, again, the proposed amendment was for clarifying the current Regulations, no change involved. Mr. Eaton indicated the matter had been thoroughly investigated by the Staff, and therefore the recommendation for approval comes before the Board. Dr. Baker moved **that the**

**Board approve the amendment to Section 2, Subsection D., of the Rules and Regulations governing methods of performing chemical analyses of the breath to determine amount of alcohol in the blood and the granting, termination, and revocation of permits to individuals to perform such analyses.** The motion was seconded by Dr. Dawsey. The secretary was instructed to let the Minutes show that no member of the public has objection. The motion was, therefore, given unanimous approval. A copy is attached to the official Minutes.

Mr. Eaton next called the Board's attention to the Statewide Medical Examiner Laws. The law as enacted by the 1967 General Assembly, provided that the Medical Examiner fee for each investigation would be \$25. The law, however, is silent in respect to autopsy fees when pathological examinations are performed. The Chief Medical Examiner has established a fee of \$150 per case, subject to the approval of the Board. Consultations have been held with pathologists and other members of the medical profession, and surveys have been made of charges in other states, and it has been determined that this is a reasonable fee for the county, and in appropriate cases the State, to pay. Our requested budget, now before the General Assembly, has been predicated on the basis of this recommended fee. There followed brief discussion as to the advisability of setting a figure, since some cases would not require more than \$50 worth of work while some may exceed the \$150 figure. Dr. Baker moved **that The State Board of Health establish a "usual" fee per autopsy case at one hundred and fifty dollars (\$150.)** This motion was seconded by Mr. Randleman and given unanimous approval.

Dr. Martin P. Hines, Director, Division of Epidemiology, announced to the Board the establishment of a Pesticides Program in which the Staff will seek to investigate various aspects of the use of pesticides and their relationship to public health. Initially we will be concerned with determining the problem and its extent. After this, we will seek to take whatever course of action is indicated. Dr. Raper urged Dr. Hines to keep the Board posted as developments occur.

The board was briefed on upcoming legislation in the area of Occupational Health. Dr. Hines explained that Dr. Koomen and he had been working for some time with Senator Gordon Hanes to draw up a proposed law to protect industrial employees in North Carolina. Dr. Hines indicated the general purpose of the proposed law is to assist industries in North Carolina and to protect industrial employees in North Carolina by eliminating, where possible, preventable occupational disease and health hazards in this State. This will be done through a system of minimum workroom standards and inspection of

employees working conditions under the supervision of Staff members of the State Board of Health.

There are wide variations from state to state in the administration of occupational health laws. One often permits what another state outlaws as detrimental to worker health. This has caused federal agencies and the Congress to consider the passage of broad legislation in this field, which would be enforced by the Department of Labor and the Department of Health, Education and Welfare.

At present, with the exception of state laws concerned with radiation and the so-called "dusty trades", North Carolina has no law which would permit a state agency to make studies and surveys concerning occupational health hazards. Our present program, with the exception of the dusty trades, is a voluntary program.

It is estimated that in the United States each working day 9,000 people are injured and 60 die from diseases and injuries in industries. Another statistical source reveals that 14,000 lose their lives in accidents, 2,500,000 become disabled by diseases and accidents and 7,000,000 will be injured in accidents connected with their work each year. It is estimated that these deaths and injuries cost seven billion dollars each year in lost wages, medical costs, and production delays. As examples, we now know that 1,000 uranium mine workers are believed doomed to die from lung cancer from inhaling radiation dust in uranium mines; 80 per cent of 120,000 bituminous coal workers suffer from pneumoconiosis caused by coal dust; the use of the Laser beam, a newcomer on the industrial scene, is endangering the eyesight of thousands of workers working around it.

We are turning out new and possibly dangerous products at an unprecedented rate. A new, potentially dangerous chemical is introduced in the United States every twenty minutes, with few, if any, studying what the effect will be that each chemical may have on the workers' health. On the average, the states spend 40 cents per year per non-agricultural worker for industrial safety, and some spend as little as two cents. North Carolina now spends approximately seven and one-half cents per person per year on the control of occupational diseases. The state laws and health department staffs, including those of North Carolina, are dismally inadequate.

Many corporations have done an excellent job of reducing accidents on the job, and most of our industries obviously work hard and conscientiously to promote on-the-job safety and health, but the real problem is a lack of knowledge of the problem that exists; for example, on the basis of scattered evidence, we suspect that many occupational

diseases and deaths go undetected, unprevented and unreported from lack of both money and technicians to do the job, as well as for lack of the authority to inspect the working conditions that exist.

We also need more research efforts on exposure to toxic substances and we need more information on which to base workroom standards for specific occupations.

The cost to industry would no doubt be negligible in many situations. In others, it might be substantial, depending of course, upon what would be required to correct the hazardous condition. The proposed law would give the State Board of Health the authority to make studies and the authority to pass upon reasonable workroom standards after a thorough inspection and study of employee working conditions have been made.

The major problem to the State Board of Health will be to obtain funds and recruit personnel for investigation and research activity.

Dr. Hines further said that the Governor's Occupational Health Council is the one to work with this legislation and to primarily see it through; but it should have the blessings of the Board of Health before being passed on to Senator Hanes. There were suggested changes in the proposed law: (1) in paragraph (a) Section 3. **Definitions.** change "nine" to "five"; (2) page two, Section 4. **Minimum Standards.** delete "Minimum" on line 17; (3) page three, Section 6. **Control of hazards.** line 24 and 28 should read "State Board of Health" instead of "State Health Director;" (4) page four, Section 7. **Reporting of Occupational Diseases.**, line seven delete "within forty-eight hours of his diagnosis." and place period (.) after "**State Board of Health**". Dr. Hines indicated that at present, we can go into an industry only upon the request of management. Dr. Hines said, "I would not lead the Board to believe this matter may not be controversial." For this reason particularly, I wanted the Board to be apprised of what is being done. Since the Staff is requesting the Board's blessing, Dr. Dawsey moved **The State Board of Health approve "in principle" the proposed legislation concerning an occupational health law.** Dr. Baker seconded the motion and it was carried unanimously. A copy of the draft law is attached to the official minutes.

The next item for discussion were proposed changes in the Vital Statistics Laws of North Carolina. Dr. Hines presented each Board Member with a copy of the blue law book, and an eight page mimeographed explanation of several proposed changes. Each of the recommended changes was preceded with a discussion paragraph to eliminate a long presentation before the Board. Dr. Hines did comment on two;

one the fact the recommendations would be changing the current fee of one dollar charged for a birth or death certificate to two dollars; and the "closing" of the vital records to the general public. The latter one is the one that will perhaps cause more concern to the public at large. There was discussion about the recommended change listed on page seven "G.S. 130-70. Register of deeds to preserve copies of birth and death records." After the discussions, Dr. Baker moved **that the suggested change be amended in the following manner: line four under "G.S. 130-70" beginning "no persons other than those authorized . . ." should read . . . "No person other than the local coroner, sheriff on court order, those persons with the certified permission of the nearest of kin, or the custodian of the records shall have access to these records."** . . . Dr. Steiger seconded the motion and it was passed unanimously. Dr. Dawsey moved further **that The State Board of Health approve "in principle" all the amendments herein presented.** Dr. Maness seconded and the Board approved unanimously. A copy of these changes is attached to the official Minutes.

Dr. W. Burns Jones, Jr., Assistant State Health Director, reviewed briefly with the Board the current status of the Cancer Cytology Screening Program of the Board of Health. A copy of the explanatory letter is filed with the official Minutes.

Dr. Koomen was invited to comment on current items of possible interest to the Board Members. He indicated that we are still having growing pains and in need of additional space. We were treated very nicely in the "A" Budget. In the "B" Budget, we received support in four of the six items requested. The two items omitted were "Health Aid to Counties" and "Dental Aid to Counties" (for purposes of fluoridation). We should like to have additional support for mental retardation work. Dr. R. Page Hudson, Chief Medical Examiner, was introduced. Dr. Koomen also announced that Dr. Arthur McBay will be joining the Medical Examiner's setup as the toxicologist. Dr. Koomen thanked Mrs. Margaret Bryant for the beautiful floral arrangement decorating the Board Room. Dr. Koomen also expressed our concern over having to get items to the Board at the last minute, particularly legislation. The reason for this is that the Institute of Government helps with all our legislation and they are so pushed for time during the General Assembly sessions. Dr. Koomen also announced that the next Board meeting would be the Conjoint Session on Wednesday, May 21, 1969, in Pinehurst, North Carolina. Dr. Koomen indicated that another piece of possible legislation may be on the solid waste problem.

Dr. Ronald H. Levine, Director, Community Health Division,

spoke to the employment of non-medical Health Administrators for certain local departments or districts. He said, "I brought to you earlier the plight of medical shortages in the State. More than one-third of our physician health directors are over the age of sixty, so that we are currently faced with a drastic shortage of physician directors. We have encouraged as strongly as we can the coming together of our smaller counties so that they can pool their resources and provide better health care services. Incidentally, we are moving very well with the regional offices. We have introduced the employment of trained and experienced public health administrators beginning in October, 1967. Just this month, the sixth individual was employed, this one for Johnston County. The reports we have received from these five communities are very favorable. The communities seem to be well pleased with these individuals and these administrators are receiving excellent help from the medical consultants in the community. We still rely strongly on the physician consultation and cooperation. But, for the present, this arrangement is working out very well."

Mr. Eaton indicated to the Board that a bill has been introduced in the Legislature to add blood testing to breath tests as a method of determination of alcohol content of blood. Also a bill has been introduced to authorize revocation of license for six months for those individuals refusing to take the test. Mr. Eaton also spoke to the proposed "name change of the State Board of Health." He indicated the study is underway by the Institute of Government. Dr. Koomen has appointed Dr. Jones, Mr. Jarrett, Dr. Levine and Mr. Eaton to constitute an Advisory Committee to serve with Mr. David Warren in the evaluation and tentative determination of what is "administrative" to be allocated to the Department, and "policy" to be allocated to the Board, subject to the Board's approval. This undertaking is more complex and involved than anticipated. The Board will be kept apprised of the developments and at a future time, a definite recommendation will be made.

Dr. Raper thanked each Staff member for his good work and for keeping the Board abreast of "what's going on within the Agency".

The case of Mr. Beamon was reconsidered. Dr. Koomen indicated his concern for Mr. Beamon's opinion, while at the same time the Agency's and the Board's responsibility for good public health and good public health laws. Mr. Staton commented further on this situation. He said, "We have had experience with the septic tank in subdivisions, and most of it has been very, very bad. They serve well for a short time then they begin to give trouble. We conferred with many people before we ever considered bringing these rules to the Board at

its last meeting. The population is increasing so rapidly that we are violating a trust if we do not put regulations on this situation. We have had problems with this latest amended regulation but they have been fewer than I anticipated. The planning boards have cooperated with us beautifully. I am sure that we can get further agreements from any agencies you would desire. We have discussed this with the Community Planning Division of the Department of Conservation and Development. I believe they were anticipating stronger regulations or a law to govern lot size where septic tanks were to be used. We were even encouraged by many to include watersheds of water supply streams under these regulations."

Dr. Baker asked if Mr. Braugher, of Guilford County Health Department, referred to by Mr. Beamon, agreed with Mr. Beamon's request. Mr. Staton said, "No, Sir, I believe he would not." Mr. Staton indicated Mr. Beamon could do one of two things: (1) develop property on every other lot; (2) put in proper sewage treatment system and facilities. Mr. Staton indicated that his Staff would seek the counsel of several others and ask for recommendation and would also work closely with Mr. Braugher and also send a representative from the State Board of Health to Mr. Beamon's property to make a complete investigation. Mr. Lackey reminded the Board that perhaps Mr. Beamon might get a small loan through a cooperative effort such as they have in the Appalachia area to install a sewage system. This is like a small business loan! Mr. Staton assured the Board this situation would be looked into and a report made to them as soon as possible.

There being no further business to come before the Board, Dr. Baker moved "LET'S ALL GO HOME". The motion was approved by common consent.



**MINUTES**  
**NORTH CAROLINA STATE BOARD OF HEALTH**

**Wednesday, May 21, 1969**

The regular meeting of the North Carolina State Board of Health was held in the Dutch Room of THE CAROLINA, Pinehurst, North Carolina, at 8:00 a.m., on May 21, 1969. Dr. Lenox D. Baker, Vice-President, presided in the absence of the President, Dr. James S. Raper. Other members in attendance were:

Attending:    **A. P. Cline, Sr., D.D.S.**  
                  **Ben W. Dawsey, D.V.M.**  
                  **Joseph S. Hiatt, Jr., M.D.**  
                  **J. M. Lackey**  
                  **Paul F. Maness, M.D.**  
                  **Ernest A. Randleman, Jr., B.S.Ph.**  
                  **Howard Paul Steiger, M.D.**

The minutes of the preceding meeting had been previously circulated and were approved.

Among the matters called to the attention of the Board was the Board's handsome formal photograph, a copy of which was presented to each member.

It was also brought to the Board's notice that Dr. Joseph Hiatt had been elected to AOA, a fraternity of outstanding physicians which Dr. Koomen called the "Phi Beta Kappa of medicine". Dr. Hiatt is the second Duke alumnus to achieve this signal distinction.

The first item of new business was the introduction of a resolution concerning the reporting of Rubella and Rubella Syndrome under authority of General Statutes 130-9 and 130-81. This resolution was unanimously adopted and Rubella will become one of the reportable diseases in North Carolina.

The second resolution was introduced to delete the requirement under General Statutes 130-81, that streptococcal pharyngitis (including scarlet fever) be considered a reportable disease. This resolution was also unanimously adopted by the Board.

There were then presented two proposed amendments to **Rules and Regulations governing ambulance services**, which were approved by the Advisory Committee on Ambulance Service. These amendments, which are attached to the official minutes, were moved, seconded and unanimously adopted by the Board.

The next order of business was the proposed extension of boundary lines of the Kannapolis Sanitary District in Cabarrus and Rowan Counties, presented by Mr. W. J. Stevenson of the Sanitary Engineering Division. Material was presented confirming to the Board that preliminary and requisite transactions, required before such extension takes place, had been carried out. The boundary extension resolution for the Kannapolis Sanitary District was unanimously approved.

The Board was then presented with proposed amendments to **Rules and Regulations governing the sanitation of Meat Markets, Abattoirs, etc.; Summer Camps, etc.; Private Hospitals, Nursing and Rest Homes, etc.; and Restaurants and other foodhandling establishments.** The proposed changes are in reference to the requirement for a certificate of medical examination by employees working in such establishments. The purpose of these changes is designed to ensure a more uniform standard for medical certification across the State, and to ensure the validity of such certificates across jurisdictional boundaries. After discussion and suggestions by the chair for changes in wording of the amendment, the amendments as attached to the official minutes were endorsed and passed.

Information was brought to the Board on certain suggested legislation. This legislation, which would establish an intermediate facility between a resident home for the aging and a presently licensed nursing home, is presently being considered by the General Assembly. Also being considered is the matter of licensure of nursing home administrators, which if the proposed legislation is adopted, would provide a board for such a purpose.

The chair suggested to the Board that it would be appropriate for the Board to go on record supporting Senator William James in his efforts to expand and improve the practice of nursing in North Carolina. The motion stating such support was passed unanimously.

Following brief comments by the State Health Director, the Board of Health meeting was adjourned to reconvene immediately in Conjoint Session with the Medical Society of the State of North Carolina in General Session. The Conjoint Session was chaired by Dr. Ben W. Dawsey and a presentation of the Annual Report was made by Dr. Jacob Koomen, State Health Director.

**MINUTES**  
**NORTH CAROLINA STATE BOARD OF HEALTH**

**Thursday, December 4, 1969**

The North Carolina State Board of Health held its quarterly meeting in the Board Room of the Cooper Memorial Health Building, Raleigh, North Carolina, on Thursday, December 4, 1969, at 1:00 P. M. Dr. James S. Raper, President, presided.

Attending: **James S. Raper, M.D., President**  
**Lenox D. Baker, M.D., Vice-President**  
**Charles T. Barker, D.D.S.**  
**Ben W. Dawsey, D.V.M.**  
**Joseph S. Hiatt, Jr., M.D.**  
**J. M. Lackey**  
**Paul F. Maness, M.D.**  
**Jesse H. Meredith, M.D.**  
**Ernest A. Randleman, Jr., B.S.Ph.**

Also in attendance were members of the staff and news media. Dr. Raper invited Dr. Joseph S. Hiatt to give the invocation.

Two new Board members, Dr. Jesse H. Meredith and Dr. Charles T. Barker, were introduced and welcomed. Certificates of appointment were presented to each member.

Dr. Baker moved that the minutes of the last meeting be approved as circulated. The motion was seconded and carried unanimously.

The first item of new business was election of officers for the upcoming two-year period. The Chair entertained a motion for the office of President. Motion was made by Dr. Dawsey, seconded by Dr. Maness, to re-elect Dr. James S. Raper as President. The motion was carried unanimously. The floor was then opened for nominations for Vice-President. Motion was made by Mr. Randleman, seconded by Dr. Dawsey, to re-elect Dr. Lenox D. Baker as Vice-President. The motion was carried unanimously. Dr. Raper then asked for nominations to the Executive Committee, which would consist of two persons other than the President and Vice-President. Motion was made by Dr. Baker that Mr. Ernest Randleman be elected. Motion was seconded and carried. Motion was made by Dr. Maness, seconded by Dr. Dawsey that Dr. Joseph Hiatt be elected. Motion was carried.

Dr. Raper recognized Dr. E. A. Pearson, Director, Dental Health Division. Dr. Pearson reported that many smaller cities and towns in North Carolina are not fluoridating water supplies because of the initial cost of providing equipment and training personnel. The 1969 General

Assembly appropriated \$22,500 for each year of the biennium to aid the State in its fluoridation program. The Dental Health Division will provide financial assistance, up to \$1,500, to a limited number of towns on a dollar-for-dollar matching basis in order that these towns might institute fluoridation programs. This money will be used to (1) purchase fluoridation equipment, chemicals, and laboratory equipment necessary for fluoride surveillance ;and (2) provide training necessary to qualify the water plant operator to adjust the fluoride content of the community water supply. Because of limited state funds, applications will be processed according to the date submitted. Dr. Pearson said he felt confident that by February or March all funds appropriated would be encumbered and would be used within the year.

Mr. Dayne H. Brown, Chief, Radiological Health Section, presented the proposed changes in the North Carolina Regulations for Protection Against Radiation. Mr. Brown explained that the agreement between North Carolina and the United States Atomic Energy Commission requires that the North Carolina Regulations for Protection Against Radiation be compatible with the rules and regulations of the U.S. Atomic Energy Commission. He said, "Our regulations were last amended effective January 1, 1967. Since that time there have been numerous changes in the regulations of the Atomic Energy Commission and in order to maintain our agreement we feel it necessary to have the proposed changes adopted. The General Statutes require that any changes in these regulations be approved by the Governor; we have received today a letter from Governor Robert W. Scott approving the proposed changes. Dr. Raper inquired if any member of the public desired a hearing regarding this matter. There being no such request, the secretary was instructed to so indicate in the minutes. Dr. Dawsey moved **that the Board accept the changes in the North Carolina regulations for protection against radiation as outlined.** The motion was seconded by Dr. Baker and carried unanimously. A copy of the amended regulations is attached to the official minutes.

The next item on the agenda was a public hearing relative to the classification and legal status of the new drug, 3,4-Methylenedioxyamphetamine (MDA). Mr. Charles Dunn, Director, State Bureau of Investigation, Dr. Peter N. Witt, Director of Research, Department of Mental Health, members of the staff of the SBI, and representatives from the Department of Mental Health were present. Dr. Peter Witt, of Mental Health, and Mr. William S. Best, Chief Chemist for the SBI, answered questions from the Board concerning the technical aspects of the drug. Mr. Dunn expressed appreciation for the opportunity of coming to talk about what he feels is a serious problem in North Carolina.

He said: "The State Bureau of Investigation believes that MDA is becoming a problem in North Carolina. We have had several cases of it in our Laboratory. We would like to point out that the findings of various individuals and groups indicate this is a dangerous drug. It is being sold and possibly manufactured in the State of North Carolina. At the present time we do not have the authority to cope with it legally." Mr. Dunn explained that MDA is not now one of the drugs included in the registry of federally controlled drugs or one included in the Uniform Narcotic Act (90-86). Statute 90-87 (9) provides for the State Board of Health to determine that a particular drug has addiction forming or addiction sustaining liability or possesses hallucinogenic properties similar to lysergic acid diethylamide. Mr. Dunn wished to know whether the State Board of Health would make such a determination of MDA. Dr. Raper inquired if any member of the public wished to be heard concerning this matter. No one did, and the secretary was instructed to let the minutes show that no one was heard. Motion was made by Dr. Baker **that the drug, Methylenedioxyamphetamine (MDA) be added to the list of drugs in the uniform narcotic act (90-86).** The motion was seconded by Dr. Dawsey and carried unanimously. Mr. Dunn thanked the Board for its action and he and his staff excused themselves.

At this point, Dr. Raper asked Mr. John Andrews, Chief, Sanitation Section, to report on the proposed amendments to Rules and Regulations Relative to Sanitation of Scallops. Mr. Andrews said that late in 1967 this Board approved regulations governing sanitation of scallops and based on experience it is felt that modification and improvements are in order; therefore, changes are proposed in accordance with material previously circulated. Mr. Andrews also pointed out that it would be helpful if these changes could be made effective December 15, 1969, as the season is already underway. After inquiring if any member of the public wished to be heard regarding this, Dr. Raper instructed the secretary to let the minutes show that no one appeared. Motion was made by Mr. Maness **that the proposed amendments to the rules and regulations relative to the sanitation of scallops be approved effective December 15, 1969.** The motion was seconded by Dr. Dawsey and carried unanimously. A copy of the Rules and Regulations is attached to the minutes.

Mr. W. J. Stevenson, Chief, Engineering Section, reported on a request from Murdoch Center, Butner, North Carolina, to permit camping and other controlled recreational activities on Lake Butner. Mr. Stevenson said field personnel had investigated this and felt these activities would be carried on in such a manner that they would not

be detrimental to the water supply. After asking if any member of the public wished to be heard in this connection, the secretary was instructed to let the minutes show that no one was heard. Motion was made by Dr. Baker **that the request from Murdoch Center, Butner, North Carolina, be approved to permit camping and other recreational activities on Lake Butner.** Motion was seconded by Dr. Maness and carried. A copy of this resolution is attached to the official minutes.

Mr. Stevenson also presented a request from the City of Rocky Mount, North Carolina, for permission to permit controlled fishing and other controlled recreational activities on the Tar River Water Supply Reservoir. He said, "Our investigation indicates that the recreational activities suggested, under strict control, would not be detrimental to the quality of the raw water supplied to the municipal raw water intake. Therefore, we recommend your favorable consideration." Dr. Raper inquired if any member of the public desired a hearing; no one did, and the secretary was instructed to let the minutes show that no one was heard. Motion was made by Dr. Baker **that the request from the City of Rocky Mount, North Carolina, be approved to permit controlled fishing and other controlled recreational activities on the Tar River Water Supply Reservoir.** Motion was seconded by Mr. Randleman and carried. A copy of the resolution is attached to the minutes.

Dr. Raper presented the next item of business which related to the Rules and Regulations for the Licensing of Nursing Homes, Intermediate Care Facilities (types A and B), and Boarding Homes for the Aged and Infirm in Combination Homes. Dr. Raper told the Board a special committee had been appointed to review this material prior to the Board session today and report to the Board their recommendations. The Committee was composed of: Dr. Joseph S. Hiatt, Jr., Chairman, Dr. Paul F. Maness, and Dr. Ben W. Dawsey.

Dr. T. D. Scurletis, Director, Personal Health Division, was recognized and spoke briefly on proposed changes in the Rules and Regulations. He explained that due to new requirements by Federal law we would now have four levels of patient care — nursing homes or extended care facilities, intermediate care facilities (types A and B), and finally the boarding homes. The Rules and Regulations have been reviewed by the Nursing Home Advisory Council, the North Carolina Association of Nursing Homes and then by the Committee today, and their recommendations have been incorporated into the documents before the Board.

Dr. Raper inquired if any member of the public wished to be heard. Mr. John Miller, owner and operator of a 200-bed rest home in Charlotte, was recognized. Mr. Miller spoke to the Board regarding his

concern especially with that portion of the material relating to staffing of intermediate care facilities and boarding home units. Mr. Jim Blanchard, President of the North Carolina Nursing Home Association, was present and stated that they had worked with the State Board of Health staff on preparation of this material and recommended that the Rules and Regulations be accepted.

Dr. Hiatt then reported for the Committee. He said: "We feel this was a pretty gigantic task. This program is going to be one of planning and adjustment as time goes on, and is one which involves a lot of people. We will have to grow with it and make whatever adjustments necessary, with the end result being the very best possible care for these people. We hope we have covered all angles in our considerations. Dr. Hiatt moved **that this full board adopt pages one through twenty-four of the rules and regulations for the licensing of Nursing Homes, Intermediate Care Facilities — Type A, Intermediate Care Facilities — Type B, Boarding Homes for the Aged and Infirm in Combination Homes, as amended.** Dr. Baker seconded the motion and it passed unanimously.

Dr. Raper presented the remaining pages of the Rules and Regulations for discussion. Dr. Baker moved **that the remaining portion of the material be referred back to the Special Committee for recommendation.** Dr. Raper said he felt the Board should take action on this matter today, and after some discussion Dr. Baker pointed out that his motion had not received a second. Dr. Maness said: "Since I have been on this Board we have been studying rules and regulations for nursing homes. I feel we should complete this matter of business today. I am willing to remain as long as it takes to finish." Dr. Maness moved **that the board complete action on the Nursing Home rules and regulations before adjourning today's session.** The motion was seconded by Dr. Dawsey and carried. After some further discussion, Dr. Raper, with the consent of the Board, tabled this item until completion of further business.

Dr. T. D. Scurletis was asked to give a report on the status of Medicaid — Title XIX. Dr. Scurletis said: "We have been working eminently with the Department of Social Services, State Personnel Department, and the Department of Administration in defining our areas of responsibility. These are primarily in the field of (1) certification of providers of services (2) medical review; (3) investigation of complaints relating to certification and licensure; and (4) consultation to existing providers in qualifying for certification. The staff is presently developing the administrative techniques and standards to be applied and we have tentative agreement with the Department of Social Services and the Department of Administration on this point. These will be for-

malized in a contractual agreement with the Department of Social Services and will require the approval of the Advisory Budget Commission prior to implementation.”

Dr. Raper then asked Dr. R. Page Hudson, Chief Medical Examiner, for a brief progress report on the Medical Examiner System. Dr. Hudson pointed out that this time last year seven counties were involved in the Medical Examiner System; as of today, forty-eight counties are involved. Dr. Hudson introduced Dr. Arthur McBay who spoke briefly on the Toxicology program.

Mr. Ben Eaton, Director, Administrative Services Division, discussed the matter of Blood Alcohol Test Regulations. These regulations govern methods of performing chemical analyses of blood to determine amount of alcohol in the blood and the granting, renewal, and revocation of permits to individuals to perform such analyses. Dr. Raper inquired if any member of the public wished to be heard. No one did, and the secretary was instructed to let the minutes reflect this. Dr. Baker moved **that the blood alcohol test regulations be adopted.** Motion was seconded by Dr. Dawsey and carried. A copy of said regulations is attached to the official minutes.

Mr. Eaton also reported on the proposed fee schedule for the State Medical Examiner System, and said: “The Attorney General feels that the Board should approve this fee schedule.” Dr. Raper inquired if any member of the public wished to be heard, and instructed the secretary to let the minutes show that no one did. Dr. Hiatt moved **that the fee schedule for the state medical examiner system be approved as presented.** The motion was seconded by Dr. Baker and carried unanimously. A copy of the fee schedule is attached to the official minutes.

Dr. Martin P. Hines, Director, Division of Epidemiology, brought the Board up to date on what has happened recently in the world of byssinosis. The newspapers have been heavily laden with articles from unions and various other sources concerning this disease, which is also known as “brown lung disease”, “Monday morning asthma”, etc. This condition is characterized by coughing, tightness of the chest and wheezing, and leads to chronic bronchitis. We have over the past two years completed two studies in North Carolina on byssinosis and this year presented scientific data before the American Thoracic Society. The Division of Epidemiology has recently completed a survey of some twenty plants, from which 8,000 employees will be selected for certain tests. We expect this study to take about two years.

Dr. Raper responded that when we agreed as a Board that it was just and proper for the State Board of Health to go into the health



hazards of working conditions in the State, we never dreamed we would receive such fine cooperation in "what I consider such a difficult field. For the fact that it has been carried on in such a cooperative manner, we may thank our lucky stars."

The remaining portion of the Nursing Home Rules and Regulations was discussed. Mr. Dick Short, Administrator of the Presbyterian Home, High Point, was present, representing the non-profit homes in North Carolina. Dr. Raper said he wanted each and every person to know that he wanted everyone to be satisfied as these rules and regulations are reviewed, and wanted to be certain that anyone desiring to be heard was heard on every question. Dr. Meredith said he had had no previous experience working on this material, and wished to know if these regulations would be applied to existing nursing homes as well as to new homes when they are built. Dr. Koomen explained the rules and regulations would be distributed to existing homes as well as to new homes.

Dr. Maness moved **that the particular item under consideration be considered approved unless a member of the board dissented.** Dr. Meredith seconded the motion, and it passed. The Board began with page twenty-five and went over the material item by item. Dr. Raper asked for any other comments. Dr. Dawsey stated a debt of gratitude was due all concerned for the work that has gone into the preparation of this material. The Board was in complete agreement. Dr. Dawsey moved **the the remaining portion of the rules and regulations for the licensing of Nursing Homes, Intermediate Care Facilities (Types A and B, and Boarding Homes for the Aged and Infirm and Combination Homes be approved as amended and that the effective date be January 1, 1970.** Dr. Maness seconded the motion and it was carried unanimously. A copy is attached to the official minutes.

After some discussion, Dr. Hiatt moved **that there be established and recognized a level of care known as intermediate care, types A and B.** Dr. Dawsey seconded, and this motion was carried.

Dr. Raper asked if there was further business to come before the Board. Dr. Koomen had no further items to bring to the Board's attention, but mentioned that the Board Room is now in the process of redecoration.

Dr. Raper said: "I have mixed emotions about being elected President of the Board again this year. I would like to assure you that I will do my best to see that the State Board of Health maintains its eminent position and every person who has anything to say will be heard."

There being no further business, the meeting adjourned.

**MINUTES  
NORTH CAROLINA STATE BOARD OF HEALTH**

**Wednesday, March 18, 1970**

The North Carolina State Board of Health held its quarterly meeting in the Board Room of the Cooper Memorial Health Building, Raleigh, North Carolina, on Wednesday, March 18, 1970, at 1:00 P.M. Dr. James S. Raper, President, presided.

Attending: **James S. Raper, M.D., President**  
**Lenox D. Baker, M.D., Vice-President**  
**Charles T. Barker, D.D.S.**  
**Ben W. Dawsey, D.V.M.**  
**Joseph S. Hiatt, Jr., M.D.**  
**J. M. Lackey**  
**Paul F. Maness, M.D.**  
**Jesse H. Meredith, M.D.**

Also in attendance were members of the staff and news media. The invocation was given by Dr. Joseph S. Hiatt, Jr.

A motion was made by Dr. Baker, seconded by Dr. Dawsey, that the minutes of the last meeting be approved as distributed. The motion was carried.

The first item of business related to rostering of surgeons for the State Board of Health Crippled Children's Program. Dr. Raper said problems have arisen during the last few years regarding this matter, but it has not been brought before the Board for the past nine years. Various organizations, including the State Medical Society, have asked for a review of the situation from this Board. Several physicians have requested to be heard regarding the present system of rostering. Material had been sent to Board members to bring them up to date with the present system, as well as abstracts of minutes of various meetings and action taken over the past twenty years. Dr. Raper asked for comments from staff and interested physicians.

Dr. T. D. Scurletis, Director, Personal Health Division, gave some background information and explained how the program began and how it has expanded. He spoke of the changes in staff over the years and said none of the present staff has intimate knowledge of the program as it began. He said the program, which includes speech and hearing clinics, cardiac clinics, and others, has had a reduction in service load of ten to fifteen per cent because of increased costs. He stated that there are 44 orthopedic clinics at present, and an estimated thirty to forty hospitals, including one state hospital in Gastonia. Ap-

proximately \$2 million is in the budget each year for the total Crippled Children's Program, which includes both State and Federal money. Dr. Scurletis stated: "To my knowledge, we have not refused to roster a general surgeon who applied and who was qualified. One of the provisions of the program is the fact that any rostered surgeon can refer a case to any qualified physician and this is a common practice in well child and other clinics. This explains why a large number of general surgeons who participate in our program have not applied for rostering."

Dr. James L. Davis of the North Carolina Chapter, American College of Surgeons, was recognized. He said there are now approximately 300 certified general surgeons in North Carolina. Only 18 of these (approximately 6%) have been able to obtain rostering on the Crippled Children's Program. This is what brings the American College of Surgeons interest into this matter. We continually hear complaints by good men, who are Board certified and screened carefully, and when they move into a community and apply to the Crippled Children's Program are told they are not qualified.

Dr. Alex Webb of Raleigh, and Dr. William Hollister were in attendance and spoke briefly, indicating that the American College of Surgeons has tried for some time to get this matter on the Board of Health agenda with the hope of improving "this very deplorable situation which is a black mark on medicine. This is a matter which creates great dissention among the medical profession in that qualified men cannot be rostered; it causes difficulty at the hospital level and causes unrest among certain segments of the general public. We hope something more equitable can be worked out."

Dr. Hollister said: "I think there has been a great deal of misinformation, and lack of information, throughout the years with regard to the Crippled Children's Program. I do not blame the State Board of Health. We think information should be disseminated to all institutions who have qualified physicians to handle these cases. We are anxious to get these things out in the open and we feel information should be forthcoming from the State Board of Health. We appreciate the opportunity of coming and being allowed to present this problem to you."

Dr. Lewis Daniel, Orthopedic Surgeon, was recognized. He thanked the Board for permitting him to speak, and described his difficulty in being rostered according to the regulations relating to rostering of **orthopedic** surgeons. He said in conclusion: "I feel that the present rostering system is discriminatory and I beg of you that this matter be given serious consideration."

Dr. Raper asked if any other member of the public wished to be heard, and no one appeared.

Dr. Lennox D. Baker spoke about the background of the program, and said that it is now one of the finest programs of its kind in the United States.

Dr. Raper thanked the physicians who came. He said the Medical Society of the State of North Carolina would like to have information concerning rostering of all physicians published, either in the **North Carolina Medical Journal**, or some other publication. "This is the time for review of our present information. More information is available and will be applied to this subject before a decision is made."

A recess was called at this point, and the official photograph of the Board was made.

Dr. Raper called the Board again into session, and called attention to a letter from Chalmers R. Carr, M.D., President of the North Carolina Orthopedic Association. "At its meeting in October, 1968, the North Carolina Orthopedic Association passed a resolution to the effect that the system of rostering physicians as outlined in the brochure **Accreditation of Orthopedic Surgeons by the State Board of Health of North Carolina** should be continued. I believe we do need to have more information distributed to physicians in North Carolina as to whatever system we adopt; also, if changes are made in the present system, it should be done after thorough consultation with the organized bodies involved, and with the people we represent. All this is to give the best possible care that can be given to the people of North Carolina."

A motion was made by Dr. Baker **that the matter of regulations relating to rostering of all physicians in the crippled children's program be tabled for committee study.** Dr. Meredith seconded the motion, and it was carried unanimously.

Mr. W. J. Stevenson, Chief, Engineering Section, presented a request from the City of Greensboro, North Carolina, for permission to permit fishing, hunting, and other controlled recreational activities on Lakes Brandt, Higgins, and Townsend, the primary water supply lakes for the City of Greensboro. He informed the Board that this was primarily a review for Lakes Brandt and Higgins, and Lake Townsend was a new source. He said, "We have reviewed all material provided and it is our opinion that controlled recreational activities should not be detrimental to the quality of the raw water supply. We would, therefore, recommend approval." Dr. Raper inquired if any member of the public desired a hearing on this matter. He then instructed the

secretary to let the minutes show that no one appeared. Motion was made by Dr. Barker, seconded by Dr. Dawsey, **that the City of Greensboro, North Carolina, be granted permission to permit fishing, hunting and other controlled recreational activities on Lakes Brandt, Higgins, and Townsend, the primary water supply lakes for the City of Greensboro.** The motion was carried. A copy of the resolution is attached to the official minutes.

Mr. Stevenson then brought before the Board a request from Lake Orange, Inc. to permit fishing and other controlled recreational activities on Lake Orange, on the Eno River Class II Reservoir, the municipal water supply for the City of Hillsborough, North Carolina. Mr. Stevenson reported that the entire regulations have been reviewed and "we feel if recreational activities are carried on as in the regulations, this should not be detrimental to the water supply." Dr. Raper asked if any member of the public desired a hearing on this, and instructed the secretary to let the minutes show that no one was heard. A motion was made by Dr. Dawsey, seconded by Dr. Maness, **that the resolution be approved authorizing Lake Orange, Inc. to permit controlled fishing and other recreational activities on a class II reservoir.** The motion was carried. A copy of the resolution is attached to the official minutes.

Dr. Martin P. Hines, Director, Division of Epidemiology, presented for the Board's approval proposed regulations concerning intoxicating liquor acquired for use in controlled-drinking programs. Copies of an extract of General Statute 20-139.1, Subsection (g), were distributed. Dr. Hines told the Board: "We have given great care to preparing these regulations. They have been approved by the Board of Alcoholic Control, the Attorney General, and the Department of Community Colleges, as well as by Dr. R. Page Hudson, Chief Medical Examiner." Motion was made by Dr. Dawsey, seconded by Dr. Barker, **that the proposed regulations concerning intoxicating liquor acquired for use in controlled-drinking programs be approved.** Dr. Raper asked if any member of the public would like to be heard. The secretary was asked to indicate in the minutes that no one appeared. The motion was carried unanimously. A copy of the regulations is attached to the official minutes.

Dr. T. D. Scurletis, Director, Personal Health Division, gave an information report on the implementation of Medicaid, a copy of which is attached hereto.

Dr. Jacob Koomen, State Health Director, gave a report on the new State Board of Health Building, and showed a scale model of the building being planned by the Department of Administration with the

firm of Jesse M. Page & Associates. He said: "We came into our present building in September, 1954. There are now nine buildings in the immediate area, and we occupy six of them, as well as one a few streets over. We have outgrown our space; the Laboratory is not only too small but is out of date. The new building is a five-story structure; the two upper floors will be occupied by our Laboratory and will be windowless to permit good planning for temperature and maximum wall space. The three lower floors will be office space, with windows as you see them in the model. The building will be bounded by Lane, North and Blount Streets, and is expected to be completed by 1973. The cost is approximately \$3.9 million, and the money has already been appropriated. A decision has not been made as to who will occupy office space in the new building, but the State Board of Health will be housed in two structures, the new building and the building we are now in."

The next item of business was a report by Dr. Isa C. Grant, Chief, Chronic Disease Section, on the cancer registry. Dr. Grant reviewed briefly the history of the cancer registry, using a projector and slides to emphasize her remarks. She explained that the Regional Medical Program has been conducting this service, and that the State Board of Health has been asked to assume it. The Regional Medical Program will fund the registry until the end of the biennium, which is June, 1971, at which time it is anticipated that State funding will be available for its continuance. The Governor's Cancer Commission has made this recommendation to the Governor. Dr. Grant spoke to the fact that cost of implementation in a given hospital would be related to the volume of cancer cases treated, and that this would be in general a part-time role of a records library. Dr. Grant referred to the fact that present reporting by pathologists is good, but we cannot document what percentage of the total cancer cases is reported. "Our recommendation today is that the Board approve the implementation of this project. In considering this request, the approximate cost would be \$64,000 per year." A motion was made by Dr. Dawsey, seconded by Dr. Maness, **that the Cancer Registry Project be approved for implementation.** Dr. Meredith supported the motion on the basis that this is an opportunity to get detailed epidemiologic information. The President asked if any member of the public wished to be heard, and instructed the secretary to let the minutes show that no one requested hearing on this matter. The motion was passed unanimously. Dr. Raper stated that a close look would have to be taken at this idea in general, as to cost.

Dr. Martin P. Hines, Director, Division of Epidemiology, gave a report on the status of the byssinosis study being conducted by the

State Board of Health, Burlington Industries and the Environmental Medical Center of Duke University. He told the Board that "The plan was a very ambitious one and now that we are in the middle of it I realize every day just what a large job we have undertaken. We have traveled all over the State to twenty cotton textile plants, and have tested approximately 400 people. During the next eighteen months we will be studying these plants in great detail. This program is complex; however, things are going quite well. We have excellent cooperation from Burlington Industries, and we have now a master table showing all the things we hope to accomplish in the next few months. On May 2, 1970, in Charlotte, North Carolina, the State Board of Health and the University of North Carolina, School of Public Health will sponsor a one-day National Conference on Cotton Dust and Health. This is the first conference of this kind to be held in this country. North Carolina was chosen as the site for this meeting because of the large segment of our population in textile manufacturing, and because of the State Board of Health's participation in studies of this subject."

A motion was made by Dr. Baker, seconded by Dr. Barker, **that Mr. J. M. Jarrett, Dr. J. W. R. Norton, Dr. C. C. Applewhite, and Dr. Avon Hall Elliot be rendered the honorary title of Directors Emeritus.** These men, now retired, performed a great service to the State and the public health. The Chairman inquired if any member of the public wished to be heard on this matter, and instructed the secretary to let the minutes show that no one appeared. The motion was carried unanimously.

Mr. Thomas A. Hosick was recognized, and he presented to the Board some facts regarding an air pollution research project in which he is involved. He said he understood automobiles are responsible for sixty per cent of the air pollution in this country. He turned over to the President some literature on this subject, including a book of testimony which he had given before the United States Senate.

Dr. Raper announced that the next Board meeting would be held on May 20, 1970, in Pinehurst, North Carolina, at 8:00 A.M., at the Carolina.

Dr. Raper mentioned that he would confer with other Board members as to the composition of the committee to study rostering of physicians, and hoped to have something to report on this matter at the May meeting.

There being no further business, the meeting adjourned.

**MINUTES**  
**NORTH CAROLINA STATE BOARD OF HEALTH**

**Pinehurst, North Carolina**

**Wednesday, May 20, 1970**

The North Carolina State Board of Health met in the Dutch Room of The Carolina, Pinehurst, North Carolina, at 8:00 A.M., on May 20, 1970. Dr. James S. Raper, President, presided. Other members in attendance were:

**Lenox D. Baker, M.D., Vice-President**

**Charles T. Barker, D.D.S.**

**Ben W. Dawsey, D.V.M.**

**Joseph S. Hiatt, Jr., M.D.**

**J. M. Lackey**

**Paul F. Maness, M.D.**

**Jesse H. Meredith, M.D.**

Dr. Joseph S. Hiatt gave the invocation.

Dr. Koomen introduced Mrs. Mildred A. Kerbaugh, newly appointed Assistant Director of the Laboratory Division. He also welcomed Dr. J. W. R. Norton, former State Health Director. State Board of Health Division Directors and representatives of the news media were also present.

Motion was made by Dr. Baker, seconded by Dr. Dawsey that the minutes of the last meeting be approved as circulated. The motion was carried.

Dr. Martin P. Hines, Director, Epidemiology Division, gave a supplementary report on the Byssinosis Study. He said: (1) The Division of Epidemiology recently participated in a Byssinosis Symposium at Quail Roost, which was attended by people from around the world. A \$25,000 grant was received from Burlington Industries to put this conference on. (2) On May 22, 1970, the Epidemiology Division co-operated in sponsoring an International Conference on Cotton Dust and Health in Charlotte, North Carolina. This is the first time a conference of this nature has been held in this country. The purpose of the conference was to discuss byssinosis from an educational standpoint and to provide free exchange of information and ideas. (3) Three large field investigations have been conducted in the last four years — two in conjunction with the Department of Environmental Medicine at Duke University. There are several recommendations that will be made to the Board in future months. "I am pleased to report that our work



is going well with Burlington Industries." Dr. Raper responded: "I think it behooves the Board to keep up with this project and we appreciate your keeping us informed."

Dr. T. D. Scurletis, Director, Personal Health Division, gave a progress report on the implementation of the Cancer Registry. The contract with the Regional Medical Program and the State Board of Health for the Cancer Registry has been signed by both Dr. F. M. Simmons Patterson and Dr. Jacob Koomen, and is in the process of implementation. The positions required have been set up and at present are in the office of the State Personnel Department which must pass on them. Priority in making it a part of the ongoing budget as of July, 1971, has been approved by the Governor's Cancer Commission. The Regional Medical Program is at present making preparations to transfer the information already collected to the new forms designed for statewide use. This will be done in some instances from tabulations in the system already set up, and at least one of the hospitals will continue to use their present forms and transfer the information in the necessary manner to make it comparable to the other state programs. During the summer of 1970, an advanced public health administration student who is at present in the School of Public Health will evaluate our total Cancer Program and how the Cancer Registry may be utilized to expand and improve the total program. Personnel to fill the positions established will be difficult to obtain, and we are already working on finding trained manpower to begin work as soon as possible.

Dr. Scurletis also brought the Board up to date on the Kidney Dialysis and Transplant Study. The joint Project on Kidney Planning for the State of North Carolina has been completed. It consists of a means of providing for renal transplantation and dialysis to severely disabled individuals incapacitated because of poor kidney function. The plan calls for setting up training for home dialysis and maintenance dialysis until transplantation can be completed. Specific locations and costs have not been stated. The overall need for a five-year period, however, is estimated to be about fifteen million dollars. At present the only known sources for obtaining these funds are Vocational Rehabilitation, various hospital insurances, and private medical sources. It is hoped that the plan can be implemented in the near future. Copies of a report by the members of the Kidney Planning Commission were distributed, and copies of the completed plan will be available to any physician in North Carolina who requests it.

Mr. Marshall Staton, Director, Sanitary Engineering Division, presented to the Board a proposed Resolution extending the boundary

lines of the Kannapolis Sanitary District located in Cabarrus and Rowan Counties, North Carolina. This large sanitary district was created some years ago and has been very helpful to the people. We discussed this with the Attorney General and were informed that this resolution is in accordance with the General Statutes. We, therefore, recommend its approval. Motion was made by Dr. Baker, seconded by Dr. Meredith, **that the Resolution of the North Carolina State Board of Health extending boundary lines of the Kannapolis Sanitary District located in Cabarrus and Rowan Counties, North Carolina, be approved.** Dr. Raper asked if any member of the public wished to be heard on this matter. No one was heard, and the secretary was instructed to let the minutes show that no one appeared. The motion was carried unanimously.

Mr. Staton then presented a proposed Resolution creating the Lyon's Station Sanitary District located in Granville County, North Carolina. This proposed resolution has also been discussed with the Attorney General, who assures us that it is in accordance with the General Statutes. As these people need water and sewage which would be provided by the creation of this Sanitary District, we would recommend approval of the resolution. Motion was made by Dr. Baker, **that the Resolution of the North Carolina State Board of Health creating the Lyon's Station Sanitary District located in Granville County, North Carolina, be approved.** The President asked if any member of the public would like to speak, and instructed the secretary to let the minutes show that no member of the public was heard. The motion was seconded by Dr. Maness and carried unanimously.

Dr. Jacob Koomen, State Health Director, gave a brief summary of B Budget Requests for 1971-1973, stressing that the final budget is not yet completed and several months remain before it will be presented to the Advisory Budget Commission. Each Division Director was asked to submit expansion needs in already existing programs and also new programs that should be included. They were asked to put forth money proposals and justifications, and finally to put the items in priority order so far as their particular divisions were concerned. Then the whole list, which consisted of fifteen items, was put in priority order, as follows: (1) In the first priority we have put Health Aid to Counties. In many local health departments there are minimum salaries and shortage of sanitarians. (2) The Medical Examiner System has expanded to the level where 51 counties have this service; however, personnel must be expanded so that we can cover the whole State. (3) Family Planning must be expanded. (4) Environmental Health needs expansion. (5) There have been legislative committee meetings on the Pesticides Program. The Board of Agriculture has a Pesticides Advisory Committee.

The State Board of Health, under Dr. Martin P. Hines, has done an extensive study on this and we find that a great deal more needs to be done. (6) We hope to expand our Dental Health Program, and to make the role of the hygienist much stronger, thereby making the dentist more useful in the restorative procedure. (7) **Drug Abuse** involves some five agencies. It would seem we have a real role in the epidemiology of drug use. We do have the statutory responsibility of receiving reports of addiction of drug use. (8) Dr. Hines has cited some of the work going on in the **Occupational Health** Program. We see increased need of surveillance. (9) **Developmental Evaluation Clinics** — we still have a long way to go in this program. (10) The **Multiphasic Screening Program** indicates there is increased need for turning to mechanical aids for disease discovery. (11) **Community Health** — we now have 46 Health Directors at work, part and full time. There are also six Health Administrators. Despite this, we have a number of posts unfilled and we hope to be able to persuade the Advisory Budget Commission of the reality of being able to hire a number of physicians to be located in these areas. (12) **Communicable Disease** — (a) purchase of vaccine to help eliminate disease; (b) we still have 1,200 new cases of tuberculosis per year; (c) venereal disease continues an ever present problem. (13) **Cancer Registry** — by law we are the group to whom cancer is reportable. (14) In the **Child Health Supervisory Clinic**, one is without a physician, and seven others have only one. (15) There is a shortage of **Physical Therapists** in the State as a whole, and we are terribly short in the East and West. Dr. Koomen concluded: "We present these facts to you and ask for your support in this."

The next item of business was rostering of physicians in the Crippled Children's Program, and the floor was opened for discussion. Dr. Raper commented on previous discussion and suggestions which had been offered since the last Board meeting. He said: "After considerable thought about this, it is my opinion that we should ask the Medical Society of the State of North Carolina to work with us by means of an Advisory Committee which would meet twice a year. Physicians could request rostering through this Advisory Committee, through the staff, or through the Board. My primary concerns are: (1) that the children who are served through this program receive the best possible care; and (2) that there be a democratic system by which physicians may be rostered in this program.

Dr. Barker mentioned that several dentists had spoken with him about this matter, and had expressed an interest in what was being done. "I would personally like to see an Orthodontist included in the Committee."

Dr. Baker felt it would be feasible to go to the various specialties and ask them to suggest someone among their group who would be interested and would help carry the responsibility for this program.

At this point, a motion was made by Dr. Maness, seconded by Dr. Dawsey, **that the Board recess to reconvene after the Conjoint Session.** The motion was carried and the Board adjourned to the Conjoint Session of the State Board of Health and the Medical Society of the State of North Carolina, at which time Dr. Jacob Koomen, State Health Director, presented the annual report of the State Board of Health.

Dr. Raper again called the Board into session to resume discussion of rostering of physicians. Motion was made by Dr. Baker that the President of the Board seek the advice of any and all medical organizations of the State, particularly the Medical Society, and most particularly the various specialty organizations, and appoint a committee to serve in an advisory capacity to the Crippled Children's Program, subject to the approval of this Board. There was no second to this motion. A motion was made by Dr. Dawsey **that the President of the State Board of Health consult with the Medical Society and establish an advisory committee with representatives of each of the specialties of the Crippled Children's Program and that the total Advisory Board make a recommendation for rostering of physicians for the program to the State Board of Health for its consideration.** The motion was seconded by Dr. Hiatt. The President asked for any further discussion, and Dr. Meredith spoke to the fact that we should be sure that what we are doing brings about continuity. Dr. J. W. R. Norton, former State Health Director, was recognized and briefly addressed the Board. Dr. Maness moved that the motion be amended as follows: **The State Board of Health shall be informed at each meeting of those physicians who have applied for rostering in the Crippled Children's Program and whether they were approved or not approved.** The motion was seconded by Dr. Hiatt. Dr. Raper asked if any member of the public wished to be heard and instructed the secretary to let the minutes show that no one was heard. He then called for a vote, and the motion, as amended, was passed with one dissenting vote.

Dr. Raper informed the Board that he would see that a committee was forthcoming from the Medical Society, and that meetings of this committee were held and reports made to the Board. "In all things we want an informed Board. This covers a tremendous field. If anybody feels he is not getting information he can certainly turn to Dr. Koomen, or to me."

There being no further business, the meeting adjourned.

**1968\* CONJOINT REPORT**

by

**Jacob Koomen, M.D., M.P.H.****State Health Director****North Carolina State Board of Health**

It is a pleasure to present once again the report of the programs of the North Carolina State Board of Health, this time to describe the activities during the year 1968. With the increasing need for coordination and cooperation between the providers of health services, the presentation of work of the state health agency to organized medicine in a conjoint session takes on added significance.

It should be borne in mind that this report only highlights the more recent, or more important, functions of the State Board of Health, and is not intended to be a comprehensive analysis of the work of the agency. Indeed, in the interest of economy of time to deliver it, later on in the economy of space when it is published, the many and varied activities of the agency cannot be here detailed. It is hoped, however, that not only will this commentary provide information to the practitioners of medicine in North Carolina, but will also serve to stimulate a greater acquaintance between physicians and the State and Local Health Departments.

Although the present time lends added emphasis to the cooperative relationship between organized medicine and the State Board of Health, it should be borne in mind that this collaboration is long-standing. The report to the Conjoint Session was established in March, 1893, by act of the General Assembly. The first such report was given on May 11, 1893. Thus, for three-quarters of a century, this meeting, established by law and strengthened by mutual respect, has exemplified the interrelated responsibilities of both the Medical Society and the State Board of Health.

Continuing in this historical perspective, it should be of interest to trace the evolution of the State Board of Health; by this is meant the policy-making body rather than the staff which bears the same name. The Board was established in 1877, and at that time consisted of the entire Medical Society of the State of North Carolina, which numbered 150 members from 94 counties. In 1879, however, the original act was amended to create a nine-member Board. The present policy-making body, established under Chapter 130 of the General Statutes

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\*(Presented before the Conjoint Session of the North Carolina State Board of Health with the Medical Society of the State of North Carolina, Wednesday, May 21, 1969, THE CAROLINA, Pinehurst, North Carolina.)

of North Carolina, also consists of nine members, four who are elected by the State Medical Society and five appointed by the Governor. These appointments and elections are for four years and are staggered; members may be reappointed or reelected. Of those elected by the State Medical Society, Dr. James S. Raper of Asheville serves as President. The other three are: Dr. Joseph S. Hiatt, Jr. of Southern Pines, Dr. Paul F. Maness of Burlington, Dr. Howard Paul Steiger of Charlotte. Four of those Board members appointed by the Governor are for specific positions, one being a licensed pharmacist. (filled by Mr. Ernest A. Randleman, of Mt. Airy, one being a dairyman, (Mr. J. M. Lackey of Hiddenite), one a licensed dentist, (Dr. A. P. Cline, Sr., of Canton), and one a licensed veterinarian, (Dr. Ben W. Dawsey of Gastonia). The fifth appointee is Dr. Lenox B. Baker of Durham, who also serves as Vice-President of the Board. The powers of duty of the Board of Health are broad and far-reaching. North Carolina has been fortunate in having both on its past and on its present boards, men of competence with a concern for the community, to carry out the responsibilities of one of the more important policy-making bodies in state government.

The function of the State Health Director, also established by Chapter 130 of the General Statutes, is to serve as Secretary to the Board (although he is not a voting member), and as chief executive of the agency to carry out the policies and regulations established by the nine-member Board. The State Health Director also serves in many other capacities, among them as a member ex-officio of the Executive Council of the Medical Society of the State of North Carolina. He serves on other state boards, such as Commission for the Blind and the North Carolina Tuberculosis Sanatorium System, and Medical Care Commission, and on the boards and councils of non-governmental organizations such as the Regional Medical Program. The State Health Director is elected or reelected by the Board, subject to the approval of the Governor to serve for your years.

Leaving the historical aspects, it is a pleasure to report that two new positions were created in the office of the State Health Director in 1968. The full-time positions of Planning Officer and Training Officer have been established and staffed. They are expected to enhance the capabilities of the State Board of Health in these two important dimensions. Also created has been an Intra-Agency Council to give particular attention to comprehensive health planning as it affects the state public health agency. Considerable effort has been devoted to this by the Council, and through implementation of the planning process a significant improvement is expected in the delivery of public health services in the state.

## ADMINISTRATIVE SERVICES DIVISION

The Administrative Services Division, during the calendar year 1968, experienced a comparable increase in activity as reflected by other organizational units of the department. Being a "service division", any new programs or increases in function elsewhere in the department are immediately felt in this Division. Consequently, in every phase of this Division's responsibilities, extensive increases have taken place and some new duties have been assumed by the same staff.

The Personnel Section reports that the number of employees at the State Board of Health has increased to 519. Local health department employees numbered 1,693.

The Administrative Services Division is also responsible for managing the fiscal resources of the State Board of Health. The following funds were available for public health programs:

Source of Funds	Fiscal Year Ending	
	6-30-68	6-30-69
State Appropriation	\$ 6,871,342	\$ 7,120,579
Federal Funds	6,475,743	6,829,549
Local Appropriations	10,642,301	11,040,238
Departmental Receipts	315,934	316,950
Special Bedding Fund Receipts	52,400	52,940
	<hr/>	<hr/>
TOTAL	\$24,357,720	\$25,360,256

Another divisional function is the provision of health information to the public. The weekly radio program, "YOUR HEALTH TODAY", provides tapes for broadcasting information about pertinent health matters to fifty radio stations across the State. Another operation is the Film Library, with a volume of 55,700 lendings of films in 1968. The public schools constitute 58 per cent of this distribution, although more than 40 non-profit and governmental agencies also utilize this resource. There is also a Public Health Library available to agency staff, local health departments, and others; this facility is continuing its reorganization, improvement, and modernization.

Another activity of the Division is that of liaison and coordination in legal matters regarding public health laws and regulations. There is an important relationship between the State Board of Health through the Administrative Services Division and the Attorney General's Office and other State agencies. In particular, a special study has been undertaken of the new Medical Examiner Law and assistance rendered in its implementation.

## COMMUNITY HEALTH DIVISION

The Community Health Division continues to place emphasis on improving the quality of administrative leadership in our local health departments. With the ever-increasing shortage of qualified physician administrators, four local Boards of Health were assisted in recruiting and employing trained and experienced non-medical public health administrators as their local health directors. Medical consultation was assured in each instance. There is a collateral effort to increase the number of multi-county partnership arrangements, known as District Health Departments, wherein a single administrative unit may serve more than one county. In 1968, Wilkes, Davie and Yadkin Counties combined into a statutory District Health Department, bringing the total number of such units to twenty-one. Three counties were added to the list of those having local government retirement benefits for their employees, bringing the total number of counties so covered to ninety-five.

Reorganization efforts within the agency saw the creation of a Physical Therapy Section in the Community Health Division in July, 1968. This will permit the physical therapists of the State Board of Health to coordinate their functions and services, in order to present a comprehensive physical therapy program for public health. With the assistance of this Section, a training program for physical therapy assistants was developed and implemented within the State.

Also, the Nutrition Section was transferred from the Personal Health Division to the Community Health Division. In the area of nutrition, considerable public interest was stimulated around the problem of hunger and under-nutrition in the United States. The staff of the Nutrition Section conducted a survey of 800 families taking part in the food stamp and donated commodity programs in order to discover why the programs were not reaching all those eligible for them and thus not accomplishing their purpose. The answers to the questions indicated that eligible individuals encountered transportation problems in getting to the supply of donated foods; that the food stamps cost too much for their limited incomes; and that fewer than 10 per cent of the families had been taught food-buying, preparation, or about the value of food to health. Because of this work, Senator McGovern invited Governor Moore to testify before his United States Senate Select Committee on Hunger and Malnutrition. Mr. Charles Dunn of the Governor's Office and Miss Elizabeth Jukes, Chief, Nutrition Section, testified before the Committee in December.



## SANITARY ENGINEERING DIVISION

Legislation adopted by the 1967 General Assembly was implemented during the year. Particular attention was given to inter-agency relationships. Work was done on the development of regulations governing the sanitation of the scallop industry, and regulations governing the sanitation of jails in connection with the revised law placing responsibility for jail inspections in the State Department of Public Welfare. Cooperation was given to the North Carolina Board of Agriculture, which had adopted the 1965 U. S. Public Health Service Milk Ordinance. Work has also been done on the development of proposed North Carolina-Virginia-Maryland interstate standards for the pasteurization of crabmeat. In cooperation with the State Highway Commission, it was possible to get combustion type toilets installed at the bridge tender stations throughout the State. The North Carolina Utilities Commission assisted in the revision of its bus station inspection program.

Some of the most significant activities of the Division accomplished during the year relate to the Radiological Health Program. Through this program, close cooperation has been secured with users of radio-isotopes and X-ray machines. Of particular importance has been the completion of comprehensive registration of all medical X-ray facilities. A data processing system was developed for recording the findings of X-ray facility inspections, as was a complete electronic data processing system for environmental radiation surveillance efforts. A revision of the Medical Isotope Advisory Committee brought to this Committee excellent medical and scientific resources.

The completion of a solid waste disposal survey, made possible by a grant received from the U. S. Public Health Service, disclosed that solid waste produced in North Carolina amounted to 4,511,096 tons a year, or approximately one ton per person. This waste was being disposed of in 56 sanitary landfills and 422 open dumps at an estimated cost of \$18,899, 016. Considerable interest in this matter has been shown by citizens throughout the State, particularly by municipal and county officials. Progress is being made in developing proper garbage and refuse disposal programs.

North Carolina's community water supply problem remains one of the most urgent areas of concern because of the rapid expansion of fringe areas, subdivisions, mobile home parks, and other developments. There are now 1,666 municipal, community, institutional, trailer parks, sanitary district, and State and roadside park water supplies under supervision. During the year, one of the worst droughts in sixty years was experienced. A number of towns suffered critical water shortages, and others were required to take precautionary measures.

## PERSONAL HEALTH DIVISION

In an agency reorganization measure, the Home Health Services program was transferred from the Community Health Division to the Personal Health Division and was assigned to the Chronic Disease Section. Through the operation of this program, continued efforts are being made to upgrade and expand existing home health programs in our communities and to establish new ones. As part of the spectrum of health services in North Carolina, it is one that has been generally lacking and remains an important area for further development.

The Chronic Disease Section, through a special Federal contract, has been working jointly with the University of North Carolina School of Medicine and Duke University Medical School in planning for a kidney program for the State of North Carolina. The development of plans for this program involves all aspects including dialysis needs, factors regarding transplants and donors, as well as possible methods for establishing services and the funding of a service program throughout the State.

The Health Insurance Benefits Section shifted emphasis from its continuing responsibility of certification of facilities to intensified efforts in the area of consultation to facilities newly applying to participate in Medicare and to assist certified facilities to correct deficiencies. The single most important area for consultation in 1968 was that of utilization review. Six workshops were held across the State on improving utilization review committee functions. At the end of 1968, the following number of facilities were certified for participation in Medicare; 153 hospitals, 47 extended care facilities, 12 independent laboratories and 18 home health agencies.

The Nursing Home Section, which is charged with the responsibility of licensure under State Board of Health regulations of nursing homes, ended the year with 70 licensed nursing homes and 34 licensed combination homes (these facilities combine both nursing home care and rest home or home for the aging services), representing 5,813 nursing beds and 1,639 resident beds. This totals 104 facilities in 46 counties. Seven new facilities were licensed, 15 sets of blueprints and specifications were approved and 12 projects were under construction at the end of the year. In addition, the section was involved in assisting with the development of a training program for nursing home administrators.

The Metabolic Screening Program of the Maternal and Child Health Section, in cooperation with the Laboratory Division, has tested over 90 per cent of all newborns in North Carolina in 1968. Six PKU pa-

tients were identified, and the appropriate treatment given, which should prevent the retardation encountered in this disease. The Developmental Evaluation Clinics, also operated by the MCH Section, saw a 42 per cent increase in patients served, to a total of 3,181. Family Planning Clinics served 21,140 patients in 1968, a 25 per cent increase over the previous year. In addition, a central genetic counseling program concept, as authorized in the 1967 General Assembly, was begun July 1, 1968, utilizing the University of North Carolina as the focus for development. This highly specific type of consultation has long been needed and generally not available to the citizens of North Carolina.

### EPIDEMIOLOGY DIVISION

The policy-making Board of Health reviewed in late 1968 a general revision of the Communicable Disease Control Regulations and subsequently approved the regulations which are now in effect throughout the State.

The year 1968 saw a number of significant activities in the field of epidemiology. Over 75,000 doses of measles vaccine were distributed to county health departments. September, 1968 was the first month that no measles cases were reported since the disease was made reportable in North Carolina. Also, the staff of the Epidemiology Division assisted in a field trial of rubella vaccine in Wake County, which has national interest in that it is one of the important preliminary activities in the development of an approved rubella vaccine.

The year 1968 will also be remembered as an epidemic year for influenza, as a result of the introduction of a Hong Kong influenza virus strain in the State and Nation. One of the functions of the state health agency is to assist in the immunological identification of such outbreaks and to try to trace the epidemiologic pattern in the population.

In the area of Venereal Disease Control, the U. S. Public Health Service Project for early identification and prevention of the spread of syphilis was continued during 1968, and the decline in reported cases was continued for the fourth consecutive year. Gonorrhea, however, is increasing, with little expectation for control in the immediate future. The provision of drugs and treatment for those unable to pay is a further function of the Epidemiology Division.

The Public Health Statistics Section is an important part of the Epidemiology Division. The staff of this Section provided needed statistical data to state, regional, and local organizations engaged in comprehensive health planning, including the Regional Medical Program. Efforts are being made to make a gradual transition to a computer-

oriented system of data processing for speed and flexibility in handling of statistical information.

In the field of Occupational Health, epidemiological studies of specific industrial populations were initiated, utilizing medical consultants at Duke and the University of North Carolina. Studies of phosphate workers for fluorosis and textile workers for byssinosis were carried out. Measurements of industrial noise exposure were made in selected industries and the application of new safety standards for noise indicated that hazardous exposure levels exist. Pneumoconiosis continues to be a problem in North Carolina. A comprehensive occupational health bill was drafted for introduction in the 1969 General Assembly and, if enacted, will be the first of its kind in the Nation.

In the Accident Prevention Section, a Driver Medical Evaluation Program was established in cooperation with the State Medical Society and the Department of Motor Vehicles. The program is supported by a grant from the Department of Transportation. Also, several courses for ambulance attendants were held in cooperation with the Department of Community Colleges. The Division Director continues to represent the State Board of Health on the Governor's Highway Safety Program. Special attention was given to the development of highway safety standards having to do with emergency medical services and the medical aspects of driver licensing during the year 1968.

A Pesticides Investigative Unit was established to study the human aspects of the pesticides problem. More information about this will be forthcoming from the studies of the unit.

#### LABORATORY DIVISION

One of the many activities of this Division is the distribution of biological products, such as polio vaccines, smallpox vaccine, rabies vaccine, as well as the maintenance of stocks of biologicals which are little used, and hard to get in an emergency, such as Diphtheria Antitoxin and Tetanus Antitoxin. The Laboratory also conducts a certification program for all laboratories which perform serological tests for syphilis required by the North Carolina Marriage Law, all laboratories examining milk for interstate shipment, and all laboratories examining water used on common carriers engaged in interstate traffic.

One of the laboratory services is the examination, required by law, of every public water supply in the State once a month to determine if the water is fit for human consumption. The activity was one of the original services provided when the Laboratory Division was first established and remains one of the most important ones performed. At the

present time, there are over 1,700 public water supplies on the mailing list to receive monthly samples and new ones are being added at the rate of over 200 per year.

It may also be of interest to note that an additional continuing service is syphilis serology, and today over 350,000 specimens are being examined each year.

These are representative examples of the work of the Laboratory Division in protecting the health of the citizens of North Carolina.

One of the most valuable of the Laboratory's other activities is the training that it gives to its own staff members, the state's venereal disease epidemiologists, and many laboratory workers from local health departments, hospitals, and private laboratories, in an effort to improve the level of laboratory service all over the State. The Laboratory also cooperates with Holding Technical Institute in Wake County in giving some of their Certified Laboratory Assistant students on-the-job training in microbiology. The Division also participates in the Industrial Cooperative Training Program of local high schools.

#### DENTAL HEALTH DIVISION

The regular services of the Dental Health Division continue to reach many school children in North Carolina to provide necessary dental examinations, referrals and services. The staff in 1968 treated 20,505 indigent school children with preventive and corrective treatments. In addition, 28,605 were referred to their family dentists.

Fluoridation of community water supplies remains one of the most effective preventive measures for dental diseases. Of those persons in North Carolina who are served by municipal water supplies, 74.5 per cent are drinking fluoridated water. Last year, four additional cities in North Carolina began fluoridation of their municipal water supplies. However, over half the population of North Carolina reside in areas which are not served by municipal water supplies and do not benefit from community water fluoridation. The Dental Health Division has, therefore, turned to other means of fluoridation as a method of protecting rural children against dental cavities. The Division, in cooperation with the Laboratory and Sanitary Engineering Divisions of the State Board of Health, implemented the fluoridation of five rural school water supplies during 1968. Also, special studies are being conducted such as that to test the effectiveness of two topical fluoride solutions. This has been completed and the data is now being tabulated and analyzed. The study of the effectiveness of fluoride supplements in reducing dental decay was continued for the sixth year of its seven-year dura-

tion. A new twelve-year study, intended to determine the optimum level of fluoridation for rural school water supplies, was begun in 1968 in cooperation with the U. S. Public Health Service.

A special summer program using senior dental students from the University of North Carolina Dental School, under the supervision of staff dentists, was continued resulting in the provision of services to 2,130 children. This program also provided a unique educational experience for the fifteen dental students who participated.

#### COMMITTEE ON POSTMORTEM MEDICOLEGAL EXAMINATIONS

The General Statute adopted by the 1967 North Carolina Legislature providing for a statewide system of postmortem medicolegal examinations became effective January 1, 1968. The Committee on Postmortem Medicolegal Examinations was dissolved as of that date and submitted its final report in March. Dr. R. Page Hudson, Jr., formerly of the Medical College of Virginia, was appointed as Chief Medical Examiner, effective September 1, 1968. In the interim period, the State Health Director requested the various county medical examiners to continue their performance of their duties until such time as new appointments, or reappointments, could be made.

The toxicology laboratory of the University of North Carolina School of Medicine continued to provide toxicological services to the State, under the direction of Dr. Ralph H. Wagner, Toxicologist. During the year 1968, 444 cases were examined, with 1,464 analyses (it is interesting to note the growth of this service which began in 1958 with 25 cases and 46 analyses).

With the arrival of Dr. Hudson efforts were begun on September 1st to carry out the service, teaching and research aspects of the State Medical Examiner System. All counties were contacted through the County Commissioners to familiarize them with the existence of the new Statutes, and the Medical Societies of approximately 50 counties were contacted by letter. Communication was also established with the Institute of Government, State Funeral Directors' Association, State Society of Coroners and Medical Examiners, the State Bureau of Investigation, and other organizations. Many personal appearances were made by the Chief Medical Examiner who spoke to county Medical Societies and service clubs.

The first county, Iredell, came into the statewide system on November 1, 1968. A total of seven counties had become active in the system by the end of December. Seven other counties were approved during December to begin in January, 1969. Serving the counties were

22 physician medical examiners, appointed through December, with 22 others to begin in January. To provide pathology consultation, two regional pathologists were appointed to serve during 1968; twelve others were appointed in December to begin in January. From these counties, reports on 73 medical examiner cases were received through December 31st. Nine cases were autopsied by the regional pathologists and approximately 30 autopsies were performed by the Chief Medical Examiner. Consultation was also given in other cases.

The need, mechanics and effect of the system was discussed at the annual meeting of the State Society of Coroners and Medical Examiners. Efforts were made to obtain the services of a full-time forensic toxicologist, to increase the staff of toxicology technologists, and to obtain an administrative officer.

In addition to his duties as Director of the State Medical Examiner System, the Chief Medical Examiner also serves as a teaching resource to the Schools of Medicine in the State. In the area of research, a grant was obtained to commence study of the presence and effect of certain food additives in human tissues.

## SUMMARY

The preceding report has been a synopsis of several activities of the State Board of Health, and is by no means an exhaustive list of the agency's functions. It is merely to highlight the work of the State Board of Health, and to call attention to some of many programs that are being conducted. Throughout the operation of the State Board of Health the element of cooperation and coordination, with the private practice of medicine, voluntary agencies, teaching institutions, other state agencies and the public at large, is emphasized. The provision of health services, although oftentimes of a highly specialized nature, cannot be the result of isolated and unrelated activities. Increased consciousness, especially on the part of the public, of the need for developing a continuous spectrum of health services places great emphasis on the cooperative elements of health services administration. Preventive, curative and rehabilitative resources must be blended into a smoothly functioning, coordinated system of services. To this end the State Board of Health renews its commitment to work in conjunction with all providers of health services, especially with the privately practicing physicians. Physicians are urged to establish a close relationship with their local health department and with the State Board of Health for the provision of better health care for the citizens of North Carolina.

**1969 CONJOINT REPORT**

by

**Jacob Koomen, M.D., M.P.H.****State Health Director****North Carolina State Board of Health**

Dr. Edward G. McGavran, Dean Emeritus of the School of Public Health of the University of North Carolina, has defined public health as the diagnosis and treatment of the body politic; that is, the community. It is in the spirit of this definition that this presentation is made. We will attempt to describe some of the major problems of the health of the public and what we might do to treat these problems, rather than to describe in narrow focus the specific program activities of the State Board of Health. The reason for this is that the responsibility for health promotion, disease prevention, treatment and rehabilitation is widely shared. Although some health responsibilities are the clear-cut legislated duty of the State Board of Health, the wider scope of identification and solution of the health problems of people and their environment cuts across the boundaries of many agencies and organizations, both public, private, and voluntary. Thus, while our report to you will emphasize the activities of the State Board of Health, since that is the charge in our presentation, this wider perspective must be borne in mind. Furthermore, when we speak of public health activities, we will include the work not only of our agency, but also the local health departments. These local health departments are partners with us in the provision of public health services and, indeed, represent the front line for most of our activities.

The following activities are presented as being major efforts necessary in the protection and preservation of the health of people of North Carolina. They are not presented in rank order of importance, but represent a selection, out of the varied and extensive health programs, of some of the more necessary activities.

Early detection and early treatment for chronic disease is not sufficiently available to the adult population of the state in terms of availability and promotion. Adult health services for chronic disease detection through such mechanisms as multiphasic screening is of considerable importance. Indeed a coordinated, preventive program for the entire population should be considered. Economic implications of the early diagnosis of chronic illness relative to effective treatment and prevention of long-term disability is clear, to say nothing of the social and personal potential. A strong new effort must be undertaken to develop multiphasic screening clinics which would be more readily accessible to the entire population and to promote and extend the use of



this newer concept in adult health services. These statements are particularly pertinent when one considers that 75% of medically indigent women are still in need of cancer screening and indeed, at least the same is true in cancer screening of the total female population of the state. Approximately 95% of the indigent population does not receive early detection and screening services for other chronic conditions. The goal must be to provide adequate adult health screening, including the new multiphasic techniques for the chronic diseases to the eligible population by a coordinated, comprehensive, preventive services system.

Public demand for home health services, in part due to payment for such services by Medicare-Medicaid and private insurance carriers, necessitates development of services in the seventy-one counties lacking their own services. The goal of the agency is to provide approximately 77,000 additional home visits by the end of 1972.

Considerable attention must be given by the state to the construction and renovation of in-patient care facilities such as hospitals, nursing homes, extended care facilities, and related resources.

In the area of family planning, eighty per cent of an estimated 260,000 indigent or medically indigent, potentially child-bearing women have not been reached by present services. Furthermore, less than one per cent of males receive medically-oriented birth control services. The ultimate goal must be to provide family planning and birth control services to all men and women wanting and needing the services and to promote acceptance. The end result of such effort will be the significant reduction in unwanted births. In order to do this there must be developed a comprehensive program of medical, social, and educational services. The present program must be expanded to include out-reach people to contact the public and encourage them to seek consultation. There must be a greatly expanded clinic system which would include innovations in the delivery of contraceptive services.

In the field of child health, sixty-two per cent of 361,644 medically indigent infants have yet to receive nurse screening and pediatric clinic services to prevent illness and to maintain a healthy child population. Further, the present developmental evaluation clinic do not meet the present demand for services to children with potential and existing developmental problems. The goal should be to provide intensive, evaluation services for all children in need of such services and to provide training to increase the skills of those dealing with developmentally handicapped children. Child health screening and evaluation services must be coupled with early treatment and follow-up care. Existing programs must be expanded and must coordinate both public and private resources so that the entire child population can be assured of needed diagnostic, treatment, and preventive services.

As a corollary, thirty per cent of the medically-indigent handicapped children covered by the Crippled Children's program are not receiving necessary early quality care. The goal must be to enhance case-finding mechanisms to locate and serve all children eligible at an early stage of their condition when treatment facilities optimum rehabilitation.

In spite of increased efforts and increased concern over the problems of drug abuse, the problem continues to grow. There must be increased awareness of the situation, awareness that is perceptive and enlightened, as well as determined. The problem must be handled in ways that are humane and understanding, leading to restoration and recovery, rather than in ways that are repressive and harsh, leading to further dissociation and despair.

In the area of accident prevention, major efforts must be continued and expanded in a multi-organizational cooperative venture to reduce the number of drunken drivers. Experience indicates that we must remove the drunken driver from our highways if we are to make a significant impact on the slaughter that takes place there. Efforts must also continue to deal with the problem of the medically incapacitated driver. In addition, continued emphasis must be given to the improvement of emergency medical services, including ambulances and hospital emergency rooms.

Protection of workers in North Carolina, particularly those in our growing industries, must receive our concern. Continued and expanding efforts must be made to gain new knowledge of the relationship between the employee's health and his working environment and the materials of industry which he handles. Improved surveillance and investigative techniques must be employed. With the cooperation of industry, health hazards in the working environment must be removed by appropriate engineering and other methods. Related to this is the ongoing work to learn more about the effect of exposure to pesticides including epidemiological and toxicological studies and the adoption of measures to protect the public from the ill effects of these chemicals.

In addition to maintaining programs to protect North Carolinians from communicable diseases, including tuberculosis and venereal diseases, a special effort in measles and German measles control will be made. These common childhood diseases are not innocuous, but have unfortunate effects. Measles may affect the nervous system and even cause death. The effect of German measles on the developing embryo and the resultant causation of serious birth defects is well-known. Vaccines are available for both of these diseases and intensive efforts can result in their being brought under control.

Dental Public Health continues to emphasize fluoridation, with attention to small community and school water supplies. The State Board of Health plans to test such innovative programs as the mass self-application of fluorides performed by classrooms of children under the supervision of staff dentists as well as other community research programs.

It is possible to provide restorative services to only a fraction of the eligible population in North Carolina. Auxiliary personnel must be employed to effectively broaden the scope of public dental services. These auxiliary dental personnel, in the form of dental hygienists, can be a useful adjunct to the professional staff in order to lower the cost of providing direct services to school children and to make services available to more children. Hygienists will be able to conduct the educational and preventive phases of a dental program which now consumes about half the dentist's time; the dentist will then be able to double the amount of the more costly restorative services which he presently performs.

In the field of environmental health special efforts must be undertaken to control the growing problem of solid wastes. Under authority of an act of the 1969 General Assembly, the State Board of Health is moving rapidly to develop a State Plan and to prepare standards for disposal facilities. Technical assistance will continue to be provided to local government units in planning and establishing approved facilities that often require the close cooperation of municipal and county government. These local governments must make special exertions of their own to provide needed services to their constituencies.

The trend toward multiplication of small public water systems needs to be reversed by incorporation of these systems into an effective county-wide or regional system. Program activities need to be realigned and strengthened to place additional emphasis and promotion of these county-wide and regional systems, as well as finding increased support and direct assistance for communities experiencing water problems.

With the establishment of large nuclear facilities in the State specific surveillance programs must be designed for each facility to insure that the environment is adequately protected in accordance with present regulations and other accepted standards. We must persevere in our efforts to protect the public from radiation hazards, from the growing number of industrial and other sources.

Housing will continue to be a difficult and sensitive issue. Public health programs have attacked these conditions separately from the total housing environment, but health programs are not enough to ade-

quately solve our housing dilemma. Development of an action program to provide an organized, coordinated effort by state and local environmental health personnel to improve these conditions is under consideration and an even more widely encompassing attempt at the state as well as the local level must be made to protect the quality of housing in North Carolina.

In the area of milk production, there is increasing difficulty for county units in providing adequate supervision of the industry because of its increasingly regionalized nature. Because it is exceedingly difficult for a local unit to adequately oversee the sanitation of raw milk production, it is planned for the state to supplement on a regional basis the farm inspection work of local health departments in order to insure continuing adequate supervision of milk production.

In the field of health information processing, important new developments are predicted. A state center for health statistics would be extremely useful where health data can be collected, processed, analyzed, and disseminated. Electronic data processing would be an integral part of such an undertaking. A facet of this is illustrated by the establishment of a projected cancer registry which will provide an educational vehicle aiding in the care and treatment of cancer patients, as well as assistance in the dissemination of data for research purposes regarding the treatment and control of cancer. Within the State Board of Health newer planning and organizational approaches will be explored such as systems concepts and program budgeting techniques in order to more effectively plan for public health services.

We at the State Board of Health have a major responsibility to support our colleagues in the local health departments. We seek to assure competent administrative leadership for all local health agencies. We seek to provide the necessary assistance and skill by multi-disciplinary consultation in comprehensive program planning for our local health departments and other community agencies. We expect to intensify our efforts in orienting unprepared public health professionals to their new careers as well as providing them with continuing educational opportunities. We seek to assist North Carolina communities in developing plans for meeting emergency health needs resulting from hurricane, tornadoes, flood, or any other serious disaster.

A new undertaking by the State Board of Health would be to try to assist areas where local Boards of Health have not been able to recruit competent local health directors in spite of coming together into multi-county district arrangements. In such arrangements the State Board of Health would assign public health physicians to those departments as local health directors, possibly without cost to the local governing body. This would, of course, be a limited program at its incep-

tion, but has considerable potential for enhancing competent local administration.

Work will be sustained in improving the planning practices of local health departments by the promotion of effective planning techniques and education of local staff in using these techniques. Promotion of this matter, including the use of the newer planning and management techniques, can result in the improvement of the delivery of public health services. Impetus to planning will be given by consultants in the regional offices, giving increasing importance to the field staff of the agency.

Among these field staff need to be experienced personnel whose role will be to forge local medical society, hospital staff, and other community agencies and organizations into well coordinated teams for the purpose of preparing and periodically testing the health components of community disaster plans.

Finally, the pathological and toxicological services of the Medical Examiners System are in growing demand. This resource must grow with the demand, in order to continue to aid the state in the discharge of its medicolegal responsibilities to its citizens.

An attempt has been made to present what we feel are some of the more important contemporary health needs and some of the measures that ought to be undertaken to meet these needs. They are relevant to the preservation of restoration of physical, mental, and social well-being of the people of North Carolina. In focusing on health, we must be conscious of the problems of the individual, the family, and the community, and be aware of both personal health and environmental health factors.

In conclusion, let me share with you two quotations. One is by G. H. T. Kimball, from a report to the Twentieth Century Fund. "It is bad enough that a man should be ignorant, for this cuts him off from the commerce of other men's minds. It is perhaps worse that a man should be poor, for this condemns him to a life of stint and scheming and there is no time for dreams and no respite for weariness. But what surely is worse is that a man should be unwell, for this prevents his doing anything much about either his poverty or his ignorance." The second quotation is from our own Dr. George W. Paschal, Jr., a Raleigh surgeon and past president of the North Carolina State Medical Society. "The solution of the complex problem of providing health services will require a coordinated effort. The most knowledgeable members of the health professions, the ablest men in the field of professional management and business skills, sound progressive community planners, and political leaders of vision must join hands in a common effort."

## **BIENNIAL REPORT ADMINISTRATIVE SERVICES DIVISION**

**July 1, 1968 - June 30, 1970**

The Administrative Services Division has the following organizational units: Budget and Accounting, Personnel, Public Information, Film Library, Public Health Library, Central Files, and Supply and Service.

The Director coordinates the activities of the above Sections with the general administrative requirements of all Divisions of the Department. He also assists the State Health Director, the Assistant State Health Director, and the Division Directors in developing, coordinating, and implementing the administrative functions of this Agency which are essential to the conduct of the health programs.

These responsibilities include procedures, methods, functions, and activities which may involve legal implications. Various studies and surveys are under continuous consideration by the Division with the objective of improving efficiency and of establishing more effective control.

Significant developments and activities during the biennium included the following:

### **Budget and Accounting**

As indicated by the following analysis, the volume of funds administered by the Budget and Accounting Office increased considerably during the 1968-70 biennium. With this volume increase was a substantial increase in the workload of the Section. One new secretarial position was added during the biennium to serve as secretary to the Budget Officer. Plans are developing to convert more of the procedures in the Budget Office to Electronic Data Processing equipment.

### **Personnel**

Personnel of the State Board of Health increased in number from 502 in July, 1968, to 563 in June, 1970. Local departments saw increases from 1,691 to 1,979 in the same period.

The 1969 General Assembly granted an across-the-board increase that averaged 10%. The range of percentage was 13.9% for those in the lowest salary group down to 7.5% for those in the upper salary levels.

Most supervisory and management personnel had opportunity to

entium are as follows:

	TOTAL ALL FUNDS	STATE APPROPRIATION	FEDERAL FUNDS	DEPARTMENTAL RECEIPTS	LOCAL APPROPRIATIONS
1968-70	\$55,199,616	\$15,930,661	\$13,617,334	\$ 870,645	\$24,780,967
1966-68	45,386,285	11,823,444	12,943,857	746,214	19,872,770
Total Increase	\$ 9,813,331	\$ 4,107,217	\$ 673,477	\$ 124,440	\$ 4,908,197
% Increase	21.62%	34.74%	5.20%	16.68%	24.70%

## BIENNIAL BUDGET

## FOR LOCAL HEALTH DEPARTMENTS

	TOTAL FOR ALL PURPOSES	FOR OTHER PURPOSES	TOTAL FOR LOCAL UNITS	REGULAR APPROPRIATIONS	SPECIAL PROJECT GRANTS
<b>Fiscal Year Ending June 30, 1969:</b>					
State Appropriation	\$ 7,330,317	\$ 5,064,286*	\$ 2,266,031	\$ 2,028,824	\$ 237,207
Federal Funds	6,705,800	5,438,048	1,247,752	81,016	1,166,736
Departmental Receipts	394,244	394,244	—	—	—
			11,661,047	11,661,047	—
Fiscal Year Totals	\$26,091,408	\$10,916,578	\$15,174,830	\$13,770,887	\$ 1,403,943

**Fiscal Year Ending June 30, 1970:**

State Appropriation	\$ 8,600,344	\$ 6,287,717†	\$ 2,312,627	\$ 2,028,824	\$ 283,803
Federal Funds	6,911,534	5,588,035	1,323,499	99,249	1,224,250
Departmental Receipts	476,410	476,410	—	—	—
Local Appropriations	13,119,920	—	13,119,920	13,119,920	—
Fiscal Year Totals	29,108,208	12,352,162	16,756,046	15,247,993	1,508,053
Totals for the Biennium	\$55,199,616	\$23,268,740	\$31,930,876	\$29,018,880	\$ 2,911,996

Number of Purchase Orders Written

Number of Vouchers Written

3,168

30,864

\*Includes \$23,988 from the "Contingency and Emergency Fund" to finance a program to assist Migrant labor in the proper handling of food, garbage disposal and the maintenance of a camp in a safe and sanitary condition.

†Includes \$22,000 from the "Contingency and Emergency Fund" to finance a program of assistance to Migrant labor as was done in the preceding fiscal year and \$25,890 from the "Contingency and Emergency Fund" to support two additional milk sanitarians and related costs through June 30, 1971.

participate in a one-week Management Development Program. Two professional orientation programs were conducted.

On-campus recruiting was intensified by visiting the Schools of Public Health at Chapel Hill and Columbia University, New York. Additionally, East Tennessee State University's campus was visited, and recruitment was undertaken at the American Public Health Association's annual meeting.

The Blue Cross-Blue Shield Plan was changed to reflect the increased cost of medical treatment. Our plan was the first in the State to add coverage for preventative and maintenance dentistry.

The North Carolina Teachers' and Employees' Retirement Act was again liberalized by the last General Assembly, continuing a trend. Among the changes was the recognition of the cost-of-living increase in retirement allowances, conditioned on an increase in the Consumer Price Index and on the availability of funds.

State Personnel established a new policy to allow part-time permanent employees working as much as 50% full time to earn leave and increments.

Requirements for competitive service examinations were changed so that most of the professional classifications now allow appointments based on a rating of training and experience, rather than a written examination.

### **Public Information**

Never before in the State's history has there been a greater surge of interest in public health. The Public Information Office increased its efforts to convey information to the public concerning activities of public health officials in providing increased services.

Clay Williams, veteran public information specialist, replaced H. B. Rogers, December 1, 1969. The office has since been reorganized to function more efficiently and is now playing an integral role in the over-all operation of the Agency. The Health Bulletin (43,000 circulation) is now more topical, and reader-interest has been stimulated. The weekly radio program (broadcast over 70 stations) is designed to serve the public with timely health and health-related news. News releases have increased and requests for assistance from division heads and section chiefs on matters relating to the dissemination of news indicates a growing interest in this office as an important medium in the delivery of public health services.



With a newly appointed editorial board acting in an advisory capacity, the Public Information Office has projected an ambitious service program for implementation over the next several years which includes upgrading of the contents and appearance of present publications, plans to reach more of our citizens, and new methods of communication.

The Public Information Office will continue to gather, organize and distribute legislative information and serve in a liaison capacity during the 1971 session of the General Assembly. A publication showing legislative progress in health and health-related measures will be compiled and distributed weekly to public health personnel.

### **Film Library**

The Film Library continues to reflect vast increases in all phases of its operations. The number of films available increased considerably, but neither films nor personnel were adequate to meet the tremendous demand.

The Library purchased a total of 540 films at a cost of \$73,055.70. These figures compare with 484 new films at a cost of \$67,454.80 for the previous period. There was a net expenditure of new films, replacement films, repaired films, and filmstrips of \$75,441.45.

The Library distributed a total of 115,609 films with a total of 106,811 individual shipments. Even with this tremendous distribution, the Library was unable to fill an additional 7,418 requests.

The cost of postage for distributing the above films was \$14,866.28.

Correspondence from borrowers also increased as the Library received and processed 30,875 individual pieces of mail.

Visitors numbered 10,880 as compared to 8,982 during the prior period.

Approximately 15,000 film catalogues and supplemental lists were printed and distributed.

### **Public Health Library**

The Public Health Library continues its growth and development in providing support to the programs and activities of the State Board of Health.

Services and technical functions of the Public Health Library include selecting, acquiring, organizing, classifying, cataloging, and procuring material by inter-library loans, aiding the staff in the use of materials, and disseminating information on health.

The Library currently subscribes to 175 journals, periodicals, indexes, abstracts, and other fact-finding services on the health sciences. Combining this with other materials received, there are well over 400 different specialty journals, etc., available for the staff's use. This material is checked in, scanned, and routed to the various programs, calling their attention to current information of interest.

During this period, 906 books, texts, references, monographs, and other publications were acquired, cataloged, and added to the collection. One hundred ninety-two journals were bound making a total of 1,098 new additions to the Library.

The staff is receiving a more comprehensive and continuing library service through the cooperative efforts of the State Library, whereby part-time services of a consultant-cataloger are provided, and also the area and regional medical libraries have helped to expand the Library's services by making their resources available through inter-library loan.

#### **Central Files**

Ever-increasing program activities continue to expand the operations of the Central Files. Official records are recorded, protected, filed, and retrieved as necessary by this centralized control of records. The systematic retirement of records to storage and disposal of those no longer of historical, research, or legal value is also supervised and controlled.

During this period, 597,773 records were filed and 54,672 searches were made for various information. Accuracy of operations and assistance in record-keeping problems of the Department are stressed in this system. The shelf-filing system continues to work well to improve efficiency of personnel and in the saving of space.

#### **Supply and Service**

This Section continues to reflect the vast growth of the Department in terms of personnel, new programs, and expanding programs and activities. The lack of space is a mounting problem in the delivery of services. The following will indicate the scope and volume of activities of this Section for the biennium:

#### **1968-70**

Multilith Copies Reproduced .....	13,917,181
Number of New & Revised Forms .....	3,949
Number of Copies Folded .....	487,820

Number of Copies Cut on Machine . . . . .	4,809,560
Copies Padded . . . . .	3,616,075
Educational Materials & Forms Distributed . . . . .	6,329,047
Mimeograph Copies Reproduced . . . . .	864,175
Envelopes Addressed for Divisions . . . . .	290,102
Bottles of Medicine Distributed to Health Depts. . . . .	115,311
Monthly, Quarterly & Provisional Reports Mailed . . . . .	272,342
Health Bulletins Addressed & Mailed . . . . .	1,032,000

## **DIVISION OF EPIDEMIOLOGY**

The formal organization of the Division of Epidemiology during the biennial period continued to show the following seven sections as in previous years: Communicable Disease Control, Public Health Statistics, Venereal Disease Control, Tuberculosis Control, Veterinary Public Health, Accident Prevention, and Occupational Health.

Mrs. Ruth Y. Harrell, division secretary, retired on May 1, 1970. Mrs. Harrell was a faithful and dedicated employee for over 38 years, and will be greatly missed in all of the division's activities. Miss Hazel Caudle became division secretary on May 1, 1970.

### **Administrative and Morbidity Unit**

The Administrative and Morbidity Unit was expanded to perform several administrative functions for the division director's office, including the publication of a new division newsletter, "Epidemiological Notes and Communicable Disease Morbidity Report". This report is distributed monthly to all physicians in North Carolina and several other individuals. Activities in several sections were expanded and will be discussed in detail in the section reports to follow. The division has been fortunate in having well-trained, experienced, and highly qualified personnel who work harmoniously with the employees of this and other divisions.

### **COMMUNICABLE DISEASE CONTROL SECTION**

In August, 1968, the vacant position of chief of the Communicable Disease Control Section was filled by Dr. J. N. MacCormack. The division was also fortunate to have the services of two field epidemiologists, Dr. James A. Merchant and Dr. John D. Hamilton, who were assigned to the division by the Center for Disease Control, U. S. Public Health Service.

### **Immunization Activity Program**

The Immunization Activity Program operates as a part of the Communicable Disease Control Section and is supported by federal funds. It is involved in a state-wide effort to immunize all children against the preventable childhood diseases. Special effort was directed during the biennium toward the eradication of rubella (German measles).

### **Public Health Statistics Section**

The Public Health Statistics Section performs three major functions: the collection of vital records, data processing, and statistical analysis. During the biennium the section chief, Mr. Glenn Flinchum, resigned to accept a position with the National Center for Health Statistics. Mr. David C. Corkey, biostatistician, served as acting chief until June, 1970, when Dr. James Palmersheim was appointed section chief. During the biennium the Vital Statistics Laws were revised by the General Assembly, which enabled the section to operate in a more efficient manner.

### **Veneral Disease Control Section**

The Venereal Disease Control Section lost a number of field investigators assigned to North Carolina during this biennium because of federal budget cuts. The reduction of our field personnel comes at a time when gonorrhea and syphilis continue to lead in the number of reported communicable diseases.

### **Tuberculosis Control Section**

The principal objective of the Tuberculosis Control Section during the biennium has been to support and assist local programs in meeting their needs and in maintaining satisfactory standards of tuberculosis control operations. There were major changes in the funding mechanism, and the full effect of these changes will not be felt until the start of the next biennium.

### **Occupational Health Section**

The activities of the Occupational Health Section were expanded during the biennium. A prevalence study of respiratory disease among cotton textile workers of Burlington Industries was initiated with the assistance of the Division of Environmental Health, Duke Medical Center, and the U. S. Public Health Service. An occupational health analytical laboratory was established and equipped for specialized ana-

lytical procedures in this section and the Pesticides Program in the Veterinary Public Health Section. Dr. James Merchant assumed the duties of medical adviser to the section on July 1, 1970. An occupational health bill was introduced in the General Assembly, but was not passed.

#### **Accident Prevention Section**

Activities in the Accident Prevention Section have also expanded during the biennium. A new program to provide medical evaluation for driver licensing was initiated and Dr. J. N. MacCormack, chief of the Communicable Disease Control Section, was appointed medical adviser to the program. The Emergency Medical Services Program of the section grew significantly in the training and certification of ambulance attendants and in the inspection of emergency vehicles by sanitarians in local health departments. In September, 1969, the section chief, Miss Nettie Day, was honored with **Carl V. Reynolds Award** of the North Carolina Public Health Association for outstanding contributions to public health in North Carolina.

#### **Veterinary Public Health Section**

The activities of the Veterinary Public Health Section were expanded to include a major program on the human aspects of the pesticides problem. Mr. W. A. Williams, biologist, became project director on January 1, 1969, and major contributions to knowledge of this special problem have been made during the past year.

With the exception of Hong Kong flu, there were no major outbreaks of communicable diseases during the biennium. **The Regulations and Disease Control Measures of the North Carolina State Board of Health Governing the Control of Communicable Diseases** were completely revised and distributed to all physicians in North Carolina. Mrs. Ruth Harrell, division secretary, was in charge of this most difficult and time-consuming task.

#### **Highway Safety Committee**

The division director was reappointed during the biennium to a special Highway Safety Committee by Governor Robert Scott. The committee is composed of representatives of several state agencies and is coordinated by Mr. Elbert Peters of the Governor's Office. It has the responsibility for administering the Governor's Highway Safety Program in North Carolina. The division director was also appointed by Governor Scott to the **Governor's Council on Occupational Health**

and to a **Special Committee to Study the Feasibility of Establishing a School of Veterinary Medicine in North Carolina.**

Detailed reports of the sections operating within the Division of Epidemiology, including the special Immunization Activity Program, follow:

#### **Communicable Disease Control Section**

This section's activities include:

1. Receipt, tabulation, and evaluation of communicable disease morbidity reports for North Carolina.
2. Epidemiologic investigation and consultation when communicable diseases occur and when preventive measures must be instituted.
3. Education and feedback in the area of communicable disease control in the form of lectures, statistical reports, educational materials, and articles.
4. Promotion of new preventive, diagnostic, and therapeutic procedures in communicable disease control.

Items of special interest occurring in the 1968-70 biennium include:

1. The development of a new monthly report, "Epidemiological Notes and Communicable Disease Morbidity Report", which is sent to public health workers and most of the physicians in private practice in North Carolina. This report replaces the old weekly morbidity report which went almost exclusively to public health officials. We feel that the new report has stimulated interest in the reporting of communicable diseases.
2. The licensing of rubella vaccine in 1969 was followed by the initiation of mass immunization campaigns against this disease. Much remains to be done here.
3. In conjunction with the Laboratory Division, a limited program of supplying immune serum globulin for prophylaxis against infectious hepatitis was started in November, 1969.
4. The table below shows trends in some of the reportable communicable diseases during the past 2½ years; the effect of improved reporting must be taken into consideration in interpretation.

Diphtheria, polio, and tetanus continue at a low ebb, and whooping cough continues to decline. Measles, another disease susceptible to

## NORTH CAROLINA--REPORTED CASES

Disease	Jan.-Dec. 1968	Jan.-Dec. 1969	Jan. - June 1970
Diphtheria	0	1	2
Encephalitis	10	25	13
Hepatitis, Infectious	375	652	547
Hepatitis, Serum	9	18	70
Malaria	313	331	143
Measles	324	391	780
Meningococcal Infections	99	104	66
Polio	1	0	0
Rocky Mountain Spotted Fever	39	68	24
Rubella	--	19	37
Salmonellosis	301	318	125
Shigellosis	431	133	57
Tetanus	2	3	0
Typhoid	4	13	2
Whooping Cough	53	28	18

control through immunization, is showing a resurgence and the need for a continuing battle against this infection is evident.

Infectious hepatitis is on the ascending limb of its six-ten year cycle, whereas serum hepatitis cases are rising alarmingly in association with drug abuse.

Rocky Mountain spotted fever has shown increased activity with a surprisingly high percentage of cases unable to recall a tick attachment.

Except for an unusual number of reported cases in 1969, typhoid continues at a low level because of good sanitation and not because of typhoid vaccine.

Although not a reportable disease, influenza activity was heavy in the state during both 1968-69 and 1969-70 seasons in association with a major shift in the A virus to the Hong Kong type.

### Immunization Activity Program

Since 1964 this program has conducted a birth certificate follow-up which has as its objective the adequate immunization against diphtheria, pertussis, tetanus, and poliomyelitis of all children as early in life as possible. In counties conducting this program 94 per cent of the children start their basic immunizations before their second birthday.

In 1966, through funds made available by the Vaccination Assistance Act, the Immunization Activity Program began furnishing live measles virus vaccine to local health departments for preschool age children. More than 300,000 doses of this vaccine, furnished with

these funds, has been administered in public clinics, physicians' offices, mass immunization campaigns, and epidemic control campaigns.

On July 1, 1969, the Immunization Activity Program, with funds provided by the Public Health Service, began a state-wide "Stop Rubella" program. Rubella vaccine is being furnished to local health departments for use in their clinics, and to local areas to assist them in conducting mass community-wide rubella immunization campaigns. Since this vaccine has been available to our program, twenty-four counties have conducted such campaigns. More than 120,000 children have been administered rubella vaccine utilizing these funds.

The staff of the Immunization Activity Program continues to work with local areas in planning and conducting mass rubella immunization campaigns.

#### Venereal Disease Control Section

Gonorrhea and syphilis continue to be the highest reported diseases of the reportable communicable diseases. Gonorrhea continues to be number one.

The number of persons reported as newly infected with primary, secondary, and early latent syphilis of less than one year's duration in the biennium was 1,583, a decrease of 25 per cent from the 2,108 reported in the preceding biennium, 1966-1968. The rate per 100,000 population dropped from 21.0 to 15.7.

For the third consecutive biennium (1964-1966, 1966-1968, 1968-1970) there has been a decrease in the number of reported cases of early syphilis. Perhaps the key to the decrease in morbidity has been the increase in the number of contacts to early syphilis who are given prophylactic treatment.

PROPHYLACTIC TREATMENT TREND  
OF EARLY SYPHILIS CONTACTS  
BIENNIUMS 1964-1970

Biennium	1964-1966	1966-1968	1968-1970
Primary, Secondary and *Early Latent Syphilis Cases Reported	2,858	2,108	1,583
Cx, Sx, Ax Named Who Were Given Prophylactic Treatment	2,967	4,560	4,364
Prophylactic Treatment Index	1.03	2.16	2.75

\*Less than one year's duration



As believed by many, the reason for the increase in prophylactic treatment and the decrease in early syphilis morbidity has been the intensive, rapid and complete epidemiology performed around every reported infectious case of early syphilis.

SUMMARY OF EARLY SYPHILIS EPIDEMIOLOGIC ACTIVITY  
OF VENEREAL DISEASE INVESTIGATORS  
BIENNIUM 1968-1970

1. No. Early Syphilis Patient Interviews	1,583
2. No. Reinterviews	1,460
3. No. Cluster Interviews	5,382
4. Total No. Interviews Performed	8,380
5. No. Persons Brought To Examination	11,160
6. No. Persons Brought to Treatment for Syphilis	832
7. No. Persons Brought to Prophylactic Treatment For Syphilis	4,364
8. Total Persons Brought To Treatment	5,196

The yearly trend of primary and secondary syphilis is not as encouraging as the biennium trend. In fiscal 1970, there were 554 primary and secondary syphilis cases reported with a rate of 11.2 per 100,000 population. This was the first fiscal year since FY 1964 that an increase was reported. This increase may well be attributed

to the reduction of personnel during this biennium. During the current biennium there was an average of twelve Public Health Service venereal disease field investigators assigned to North Carolina. During the preceding biennium there was an average of eighteen field men assigned.

The reported incidence of gonorrhea continued to increase. The reported incidence of gonorrhea increased from 27,946 in the 1966-1968 biennium to 35,117. One major roadblock in gonorrhea control continues to be the lack of a simple and reliable blood test for detecting gonorrhea in females.

The total expenditure for the venereal disease program for the 1968-1970 biennium was \$548,960. Of this amount, \$128,140 was state funds and \$420,820 was federal funds. Not included in the amount are the salaries of four public health advisors who are assigned to North Carolina by the National Venereal Disease Control Program, United States Public Health Service.

When requested, the state continued to furnish drugs to local health departments for the treatment of venereal disease patients and prophylactic treatment of contacts to infectious syphilis and gonorrhea.

The state continued to train venereal disease investigators in a cooperative program with the United States Public Health Service. During the biennium, sixteen men were trained in North Carolina.

At the present time, there are eleven field venereal disease investigators assigned to the state by the U.S.P.H.S.

Venereal disease education resources and materials are available to local health departments for use in the public schools. The inclusion of venereal disease education in school curriculum is encouraged. Program representatives presented educational programs, lectures, films, and pamphlets to selected groups and the general public.

#### **Public Health Statistics Section**

During the biennium the revision of the Vital Statistics Laws were enacted by the General Assembly, enabling changes in the laws concerning the responsibility for completion of the birth certificate, modification on the requirement of the burial transit permit, and the amount of fees. These changes were incorporated in a Register of Deeds Handbook and presented to the registers of deeds at their annual convention. In addition, to compensate for the increase in work load during the last biennium, additional personnel positions in regis-

tration and certification were obtained. The increase in work load necessitated developing new methods to preserve and issue vital records. The microfilm which is being sent to the National Center for Health Statistics was judged to be the best medium to develop the new method. The microfilming equipment consists of a rotary camera which can produce two microfilms, a microfilm reader-filler and a microfilm reader printer. The procedure consists of locating the microfilm jacket in the file, placing the appropriate image on the screen and triggering the reproduction button. The result is a copy of the vital record including a statement of certification.

The biennium saw many changes in the administrative personnel of the section. Mr. Glenn Flinchum left the section for a post with the National Center for Health Statistics. This change necessitated the restudy of the chief's position and its relationship to the services requested by the many sections and divisions in the State Board of Health. The position of chief was upgraded to the doctorate level. Subsequently, the position was advertised during which time Mr. David C. Corkey, biostatistician, agreed to administer the section as acting chief. After a year of searching, Dr. James J. Palmersheim accepted the position. Dr. Palmersheim will be able to provide many expertises in statistical analysis and computer data processing. In addition, the increased request for statistical services has necessitated the addition of two new statistical analyst positions and the investigation of faster methods to generate statistics.

Examples of the major changes in statistical services were the North Carolina Nutrition Survey and the North Carolina Cancer Registry. The North Carolina Nutrition Survey was the first survey to be performed by a state to determine the dietary status of its people. The survey was made at the request of the Governor and involved the Public Health Statistics Section in consultation concerning the survey design and statistical analysis. The North Carolina Cancer Registry was established at the request of the Regional Medical Program to provide an education tool for private physicians in the care and treatment of cancer patients and in the dissemination of data for research purposes. The section was instrumental in writing up the proposed projects, designing the report forms and the system of reporting.

The services of data processing were widely used by many sections in the State Board of Health. New users included the Dental Health Division, Medical Examiner Division, Information Office, and the Training Office. The Chronic Disease Section developed reporting systems for home health services, multiphasic screening, and the cancer registry. The Budget Office initiated systems designed for check writing.

Older programs were revised to keep up with the changes. The Venereal Disease Control Section revised their reporting systems. Small studies were conducted on abortion, byssinosis, and analysis of municipal water supplies. The requests made of the Data Processing Unit have completely saturated the unit. The requests for systems design and complicated computer information systems have initiated a new era in data processing in the State Board of Health.

### **Accident Prevention Section**

Accidents of all types contributed heavily to mortality, injury, and disability in the past biennium. In 1968, accidents ranked fourth among the leading causes of death in the state, causing 3,472 deaths. Of the total number, 1,891 deaths resulted from motor vehicle traffic accidents. The principal types of non-motor vehicle accidents resulting in death were accidental falls, accidental drownings and submersion, and accidents of industrial types. An interesting fact: the non-white population had 1.7 times the percentage of accidents caused by fire and flame as the white population. Both the number of accidental deaths and the death rate were down slightly in 1968 from the 1967 figures; the rate per 100,000 dropped from 71.1 in 1967 to 69.9 in 1968.

The section has continued its efforts with local health departments in the promotion of home and farm safety activities. It has also assisted other agencies and organizations, both state and local, in developing and carrying out accident prevention activities.

The Emergency Medical Services Program of the section grew significantly during the biennium. Staff participated in 37 training courses for ambulance attendants. At the end of the biennium 2,671 ambulance attendants were certified and 563 ambulances had current permits.

Early in the biennium a new program was initiated in the section — a program to provide medical evaluation for driver licensing for individuals who are suspected of having health or medical conditions which may interfere with their operating motor vehicles safely. The program is a joint one between the State Board of Health, the Department of Motor Vehicles, and the Medical Society of the State of North Carolina. It is supported by a grant from the U. S. Department of Transportation. Staff includes a program coordinator, medical adviser, and appropriate clerical assistance.

The program operates in the following manner: When the driver license examiner has reason to believe a person has a health or medical

condition which might impair his driving ability, he is required to submit, via his family physician, a standard medical report. When the report is received by the Driver License Division, any additional medical information on file and a copy of the individual's current driving record are attached and the case is sent to the State Board of Health. The medical adviser screens each case and, where indicated, assembles additional information as may be required to determine adequately the medical fitness of the individual to drive a motor vehicle. He approves applicants with conditions which would not significantly impair their driving ability and refers the remainder to appropriate medical panels. There are twelve panels, consisting of three physicians each, participating in the program. These physicians are recruited by the State Medical Society's Advisory Committee to the Department of Motor Vehicles and are paid a nominal fee for each case reviewed. The panel members review each case independently and recommend that the applicant's driving privilege be approved, be approved with restrictions, or be disapproved. Recommendations are returned to the medical adviser, who prepares a summary recommendation for forwarding to the Driver License Division.

During 1969, 2,940 medical reports were reviewed; 72% of these were new cases and the remainder were follow-up of cases previously identified as having medical conditions which would interfere with safe driving. Of the total, 576 individuals were denied driving privileges; 327 were allowed to continue driving with restrictions; and the remainder were not restricted, but the majority are required to submit follow-up medical reports at periodic intervals.

In summary, section activity has increased significantly during the biennium with the addition of one new staff member to the Emergency Medical Services Program and two new staff members for the Driver Medical Evaluation Program.

#### **Occupational Health Section**

A prevalence study of respiratory disease among cotton textile workers of Burlington Industries was begun with assistance from the Division of Environmental Health, Duke Medical Center, and the United States Public Health Service. The objectives of this study, which is still in progress, include the determination of the prevalence of byssinosis, diagnostic techniques, limits of exposure to atmospheric contaminants, and methods to control this occupational disease. Pulmonary function testing, X-ray examination, and interviews will have been performed on approximately 4,500 employees when the study is

completed. Concurrently, thousands of plant atmospheric samples will be collected and analyzed.

An occupational health analytical laboratory was established in the Laboratory Division building and is being equipped by this section for specialized analytical procedures required by the Occupational Health and Pesticides Programs. This new facility is staffed by new employees — an analytical chemist, a chemical analyst, and a medical laboratory technician.

X-ray examinations of 1,000 employees of the brick industry were made to determine if any cases of silicosis may be developing in this industrial population. Engineering surveys have indicated some employee exposure to mineral dusts containing free silica. No silicosis was found.

This section contributed equipment and personnel to a very thorough study of asbestos workers performed by the United States Public Health Service. This National Medical/Engineering study has resulted in changes in the concept of safe levels of exposure of asbestos workers to dusts of this mineral. Operations within the old limits of employee exposure continue to generate new cases of asbestosis each year in North Carolina.

A comprehensive occupational health bill was introduced to the State Legislature, but was unsuccessful. The bill provided for: (1) workroom atmospheric standards; (2) occupational disease reporting; (3) right of entry to industrial establishments; and (4) enforcement of standards, and would have been applicable to all occupations.

The Eleventh and Twelfth Annual Industrial Ventilation Conferences sponsored by this section and North Carolina State University enjoyed capacity enrollments. This week-long course in Ventilation System Design for Engineers in Industry is a continuing project of this section.

Minor industrial hygiene studies have been made for numerous pollutants and physical hazards including noise in textiles, quarrying, chemical exposures in the furniture and related industries.

#### **Tuberculosis Control Section**

No dramatic reduction in reported new active cases of tuberculosis has occurred during this biennium compared to previous reporting periods since 1970. This is not unexpected since the proportion of middle-aged and older adults already infected and liable to suffer break-

## OCCUPATIONAL DISEASE/HEALTH PROTECTION STUDIES

Activity	Total	Dusty Trades	Non-Dusty Trades
Engineering Surveys.....	685	501	184
Field Determinations.....	1,358	614	744
Laboratory Analyses.....	1,859	1,633	226
Chest X-Ray Films Made.....	19,240	14,258	5,082
Number of Plants.....	364	344	20
Chest X-Ray Films from Other Sources.....	4,787		
Total Chest X-Ray Films Processed..	24,127	---	---
Follow-up Studies:			
Sanatorium.....	93	93	---
Other (Personal Physician, Clinic, Health Department).....	442	374	68
Pathology Reported:			
New Silicosis			
Stage I.....	20	---	---
Stage II.....	5	---	---
New Asbestosis			
Stage I.....	8	---	---
Stage II.....	2	---	---
Actual/Suspected Tuberculosis....	31	31	---
Heart.....	21	21	---
Tumor/Carcinoma/Neoplasm.....	20	20	---
Emphysema.....	6	6	---
Pneumonitis.....	11	11	---
Pleurisy.....	7	7	---
Others/Undetermined.....	29	29	---
Work Cards Issued.....	18,196	18,196	---
Advisory Medical Committee Reports to Industrial Commission.....	62	---	---
Case Hearings.....	44	---	---

down into clinically active disease without re-exposure to infection is still quite high. It is gratifying to note, however, that the rate at which young children are being infected has reached an all-time low, and this augurs well for the future in terms of eventual eradication of tuberculosis several years hence.

The principal objective in tuberculosis control continues to be to apply whatever measures are practicable to accelerate the slowly declining incidence of new cases. During the biennium under review, this has been vigorously pursued by supporting and assisting local control programs in meeting their needs and in maintaining high standards of program operation in the following ways:

1. Direct financial assistance under the terms of the United States Public Health Service tuberculosis control project grants to the states for improved tuberculosis control services at the local level:

During the biennium a change in the funding mechanism of this program occurred, effective November 30, 1969, resulting in the transfer of funds from categorical to block grant status. Earmarked block grant funds for tuberculosis control are at a level of approximately two-thirds of amounts that were being received under the categorical project arrangement. The full effect of this change will not be felt until the start of the next biennium.

At the close of the present biennium, 45 North Carolina counties and one city health department received \$674,605 awarded North Carolina under this project for the fiscal year ending June 30, 1970. These funds supported full-time in tuberculosis control activities 39 public health nurses, two public health investigators, 33 case register clerks, one X-ray machine operator, and the part-time salaries of several X-ray machine operators, two health aides and four clinic physicians in the following participating counties: Alamance, Beaufort, Bertie, Bladen, Buncombe, Cabarrus, Camden, Caswell, Chatham, Chowan, Columbus, Craven, Cumberland, Durham, Edgecombe, Forsyth, Gaston, Gates, Greene, Guilford, Halifax, Hartnett, Hertford, Johnston, Lee, Lenoir, Martin, Mecklenburg, Nash, New Hanover, Northampton, Onslow, Orange, Pasquotank, Perquimans, Person, Pitt, Richmond, Rockingham, City of Rocky Mount, Rowan, Sampson, Scotland, Wake, Wayne, Wilson. These counties together account for approximately two-thirds of the state's population and approximately three-fourths of the reported tuberculosis morbidity for the calendar year 1969 originated in these areas. As in the previous biennium, project funds to assist in



the purchase of expendable supplies and to pay for routine travel of project personnel have been provided.

The total level of support under this project for the fiscal year ending June 30, 1969, was \$648,764.

Approval has been obtained this biennium for additional support (\$17,701), effective July 1, 1970, for Robeson County.

An amount of \$37,112 was awarded under the project to assist several counties replace obsolete chest X-ray and film developing equipment.

2. Mobile chest X-ray clinic program: During the course of the biennium under review, this program was responsible for the taking and interpretation of 47,956 chest X-rays, the majority of them miniature films. Screening activities have been concentrated in areas of high prevalence and have been coordinated with model city programs in two localities, one for a period of six weeks for intensive survey work.

3. Consultative services: With the aid of a consultant staff consisting of one public health physician, one public health nurse (Mrs. Ruth Gwyn), two public health advisers (Mr. H. M. Anders and Mr. J. W. Lawson), consultative services have been available to assist local programs.

In addition to individual consultations, sometimes singly and on occasion as a team, seminars and in-service training programs have been held in response to requests received from local health department staff. Staff members have participated in numerous workshops, seminars, and meetings with other agencies whose work involves or touches on control of tuberculosis.

4. Direct clinical and other services: The section has continued to be responsible for providing chest X-ray interpretative services for a number of counties involving the reading of 67,495 chest X-rays, the majority of them miniature films, during the course of the biennium.

Clinician services have been provided by the section chief for four county chest clinics during the period .

Again, several thousand tuberculin skin testing items have been provided counties at heavily discounted prices, funds for the subsidies being obtained from accrued balances, principally in the mobile chest X-ray clinic program.

In addition to staff previously enumerated, the activities of the section have been supported by three clerks and three X-ray technicians.

### **Veterinary Public Health Section**

This section has the responsibility for planning, developing, and administering a state-wide veterinary public health program. A new program in pesticides was developed in this section during this biennium. The major activities of this section are carried out through consultation, education, field epidemiology, and service.

Epidemiological investigations of human and/or animal diseases during this biennium include the following: tularemia, psittacosis, brucellosis, trichinosis, Rocky Mountain spotted fever, encephalitis, cat scratch fever, rabies (dogs), salmonellosis, and anthrax.

In the Pesticides Program, numerous on-the-farm investigations of pesticide poisoning cases were conducted. Most poisoning cases to date have involved organic phosphorus insecticides.

A statistical survey was conducted in an eastern North Carolina county for pesticide usage. Data was collected on the types and amounts of pesticides used. Information was also compiled on how the pesticides were handled, applied, stored, and the disposal of pesticide containers and/or unused material. Surveillance activities for pesticides are conducted in air, water, and human tissue.

Surveillance of the county rabies control program activities continues through the submission of quarterly reports.

The section chief represents the State Board of Health on the rendering plant inspection committee authorized by the 1955 General Assembly urging annual inspection of all plants. One new plant was approved for operation by the committee during this biennium.

### **LABORATORY DIVISION**

It is impossible to describe the excitement and elation experienced by the Laboratory Division staff when the General Assembly of 1969 approved funds to construct a new laboratory building for the State Board of Health. It is much like the excitement a family experiences when planning a new home and contains the same hard work, painful decisions and disappointments when it is discovered that all the dreams cannot be fulfilled. For the first time in its history the laboratory will be housed in quarters designed specifically for its unique operations. The volume of services offered had become so great that one whole section was moved out of the laboratory building in order to expand. Secretaries and equipment had almost blocked its wide halls, and services such as electricity were dangerously overtaxed.

On April 22, 1970, Dr. Koomen announced the appointment of Mrs. Mildred Kerbaugh as Assistant Director of the Division. Mrs. Kerbaugh is a graduate of Wake Forest University with a Master's Degree in Microbiology and Biochemistry from North Carolina State University and has been employed by the Division for the past 20 years. Mrs. Edna Knott, a graduate of the University of North Carolina with a Master's Degree in Parasitology from the same institution, succeeded Mrs. Kerbaugh as Chief of the Infectious Diseases Section.

The division provides the laboratory resources for all other divisions of the State Board of Health, offers diagnostic services to private physicians, acts as reference laboratory for hospital and local health department laboratories and offers them consultation, evaluation and training.

The division is presently divided into seven sections whose activities follow:

#### **Administrative Section**

This section is headed by Mr. Bill McDowell, the laboratory's Public Health Administrator, and consists of the following units:

- Clerical and Bookkeeping Unit
- Materials and Supplies Unit
- Scientific Services Unit
- Laboratory Farm

The major responsibility of the section is the provision of the internal support necessary to operate a large, multipurpose public health laboratory. Services are provided in personnel, purchasing, financial management, scientific services such as the production of culture media, animal production, records keeping, equipment construction and preventive maintenance. The section is also responsible for the distribution of specimen collection outfits and biological supplies used by local health departments and physicians in the control of communicable diseases.

#### **Biochemistry Section**

The Biochemistry Section, with Mrs. Maxine Matheson as chief, continued to develop at a very rapid pace. The total number of examinations performed almost doubled over the number performed in the previous biennium. (1966-68 — 244,060; 1968-70 — 480,656). Growth of this section can be attributed, for the most part, to the current public

health interest in chronic diseases. Insufficient space for expansion in the Laboratory Division building necessitated the renovation of a two-story dwelling located at 210 East Peace Street. In July, 1969, the entire section was moved to this temporary location.

**Metabolic Chemistry.** Mass screening services continued to be offered to the entire state for phenylalanine levels in newborn infants. During the last half of the biennium a tyrosine test was performed on all PKU samples showing a phenylalanine level of 3.6Mg% or above. Work has begun on a method to aid in the detection of galactosemia, a test which will be performed on the same samples presently being analyzed for phenylalanine.

**Endocrine Chemistry.** Samples for glucose determination increased about 50% over the previous biennium. The Auto-Analyzer for Protein Bound Iodine (PBI) determination is in operation.

**Clinical Chemistry.** Several additional sites have been added in the Multiphasic Screening program (a comprehensive group of screening tests designed to detect risk factors or unknown chronic diseases in apparently healthy individuals.) These SMA-12 analyses are now being performed for two State hospitals.

The section served as a PKU reference laboratory for several State Health Departments and a Canadian laboratory, trained field technicians for a nutrition study conducted by the Nutrition Section of the State Board of Health and trained laboratory personnel at the Cherry Point Marine Base for conducting a diabetes survey. Three employees of the section spent one week each in training courses in Personnel Management, Training for Instructors and Modern Methods of Biochemical Analyses.

### **Cancer Cytology Section**

During the past thirty years, the mortality rate from female genital cancer has been reduced fifty percent. Cytology has played a major role in this reduction. Since our cytology section, with Mr. Earl Emory as chief, examines over forty percent of all smears taken in North Carolina, the North Carolina State Board of Health has played a major role in the reduction of cervical cancer in our state. Since 1948 we have examined 1,040,468 smears, 273,946 of which were examined in this biennium. The majority of these patients were medically indigent and probably would not have received this examination outside our laboratory. The sputum smears here have helped the physicians to establish a diagnosis of lung cancer approximately four months earlier than would have been possible without our service.

During the biennium our training unit sent a series of smears to the cytology section of the West Virginia State Board of Health in order to evaluate the accuracy of their new cyto-technologists. The West Virginia program was set up after they sent a staff member to our laboratory for training during the previous biennium.

The staff members in this section receive one year of in-service training before they assume the duty of screening smears. At least a year is spent screening before one is considered adequately trained to assume the exacting responsibility of cyto-diagnosis.

### **Environmental Sciences Section**

This section performs analyses of air, water, sand, milk, food, silt, and biological samples in support of the Sanitary Engineering Division, Local Health Departments, hospitals and physicians. In the area of radiation surveillance, numerous qualitative and quantitative analyses were performed for radionuclides on environmental specimens and for radioisotopes used in industry and the medical profession.

The sanitary quality of drinking water was determined for private supplies as requested and monthly for all public supplies. The number of public water supplies, which are required by law to be checked, continued to increase at an alarming rate. These water samples were checked for nuisance and toxic elements as well as for bacterial contamination.

The sanitary quality of shellfish taken in North Carolina and the water from which it comes was determined by the Shellfish Laboratory located in Morehead City, North Carolina. This program provides laboratory data for the N. C. Department of Fisheries and the Sanitary Engineering Division of the State Board of Health.

The use of newer techniques in instrumental analyses has made it possible to provide services to greater numbers of those interested in water quality. The use of atomic absorption spectrophotometry has greatly enhanced chemical analyses of drinking water. The use of specific ion electrode techniques has made analyses for fluoride in drinking water rapid and efficient.

The section is cooperating with the Dental Health Division in a study to determine the amount of natural fluoride in all public water supplies. The study is not complete but seven additional supplies have been found to contain sufficient natural fluoride to protect children's teeth.

### Infectious Diseases Section

This section, with Mrs. Edna Knott as chief, is composed of 5 units whose principal responsibility is to deliver diagnostic services in the areas of their specialties. The units are:

Special Bacteriology and Mycology  
Enteric Bacteriology (including food bacteriology) and  
Parasitology  
Streptococcus and Staphylococcus  
Tuberculosis  
Syphilis Serology

Not only has the number of specimens received by each unit increased during the biennium, but also the examinations performed per specimen. For instance, a greater percentage of syphilis serology specimens are being examined by the FTA-ABS test as well as by the VDRL test and a greater variety of diagnostic tests are being used in the identification of bacteria and fungi.

These units also serve as reference, training, and consultant laboratories. The increase in demands for these services has aroused greater interest in our own internal quality control. Several techniques and media have been tested and evaluated in everyday use and in special projects. A plan for more structured and coordinated Quality Control Program has been written and is being reviewed. Certain phases of implementation are being carried out.

The Syphilis Serology Unit continued its activities in proficiency testing by preparing approximately 42,000 serum specimens to send to the state's approved laboratories as "unknowns" for their evaluation.

"Unknown" specimens were sent to several laboratories to be examined for intestinal parasites. This project emphatically showed a lack of proficiency in most participating laboratories and the need for training in this area. A training course has been planned and is now being developed.

Personnel in this section have participated in the presentation of training courses in gonorrhea, enteric bacteriology, darkfield microscopy, and Training for Instructors. They have also given bench training to outside personnel such as technical institute students, hospital and public health laboratorians, VD epidemiologists, and public health nurses. Nine staff members attended different short courses, and four attended the Management Development Course. One person in the section is enrolled in the Off-Campus Master's Degree Program from the School of Public Health, U.N.C.

The Special Bacteriology Unit participated with the Epidemiology Division and Duke University in a field study of byssinosis, and did the laboratory work in a study on soil samples from the blackbird infested area of Scotland Neck for Histoplasma. During two disease outbreaks persons from the Enteric Bacteriology Unit participated with epidemiologists in the field investigations. With the cooperation of the V.D. investigators, the Syphilis Serology Unit is currently evaluating the use of direct immunofluorescence on material taken directly from the lesion for the early diagnosis of syphilis.

The Syphilis Serology Unit was one of the first laboratories in the country to observe and describe an atypical "beaded" pattern of fluorescence in the FTA-ABS test of some patients with systemic lupus erythematosus as reported in the March 30, 1970, J.A.M.A. A paper on our experience with this phenomenon will be presented at the APHA Meeting in 1970.

#### Laboratory Certification Section

During the biennium this section has continued to certify or approve those laboratories within the State which participate in the Laboratory Approval Program. This Program includes — **Syphilis Serology, Milk, and Water Laboratories**; and during the biennium responsibility for certifying **Independent Laboratories** for participation in Medicare has been assigned to this section. Each laboratory participating in the program has been visited annually to determine adequacy of facilities, equipment, and compliance with proper test procedures. Approval is also based on performance in proficiency surveys.

Serology Laboratories are approved for the performance of premarital serological tests for syphilis as required by the North Carolina Statutes. Those eligible to make application for approval include laboratories in hospitals, local health departments, physicians' offices, and independent laboratories under the direct supervision of a licensed physician. Currently there are 206 approved serology laboratories.

Milk Laboratories are certified under the sponsorship of the United States Public Health Service to perform bacteriological examinations on milk and milk products which are shipped interstate. These laboratories include local health departments and industrial dairy plants. There are approximately 37 certified.

Water Laboratories are also certified under the sponsorship of the United States Public Health Service to determine the sanitary quality of drinking water supplied to interstate carriers. Municipal water plants

may apply for certification. There are 14 water laboratories certified.

Independent Laboratories participating in Medicare are surveyed for compliance with the requirements of the Social Security Administration in the various laboratory specialties for which they are approved. These are laboratories which are operated independently from hospitals and physicians' offices. Fourteen (14) laboratories are covered by this program.

During the past biennium this section, with the cooperation of the Syphilis Serology Unit, conducted one two-day workshop in Darkfield Microscopy which was attended by 19 Investigators.

Also, in cooperation with the Dairy Extension Service, North Carolina State University, two one-day seminars were conducted for the detection of Abnormal Milk. These were attended by 46 plant and regulatory personnel.

#### Virology Section

This section, with Mrs. Norma Carroll as chief, is composed of three units:

Viral Isolation and Identification Unit

Immuno-Chemistry Unit

Immuno-Serology Unit

The Influenza A<sub>2</sub> Hong Kong and Influenza B epidemics during early 1969 contributed to the increase in the number of examinations for viral isolation and identification.

Requests for the Hemagglutination Inhibition tests for Rubella almost doubled every six months of the biennium: 633, 1824, 2958, 5566. More than half of the tests for the biennium were performed in the last six months.

A laboratory for the preparation of biological reagents has been staffed and equipped.

During the period, the section staff has both offered and received considerable training. From our own staff and from universities, hospitals, local health departments, and technical institutes, 214 persons received a collective total of 1,419 hours of instruction given by the section staff. Two of the staff members are in the Off-Campus Master's Degree Program offered by the School of Public Health, University of North Carolina. Staff members attended nine courses at the Center for Disease Control in Atlanta. Two staff members attended adult high school education courses.



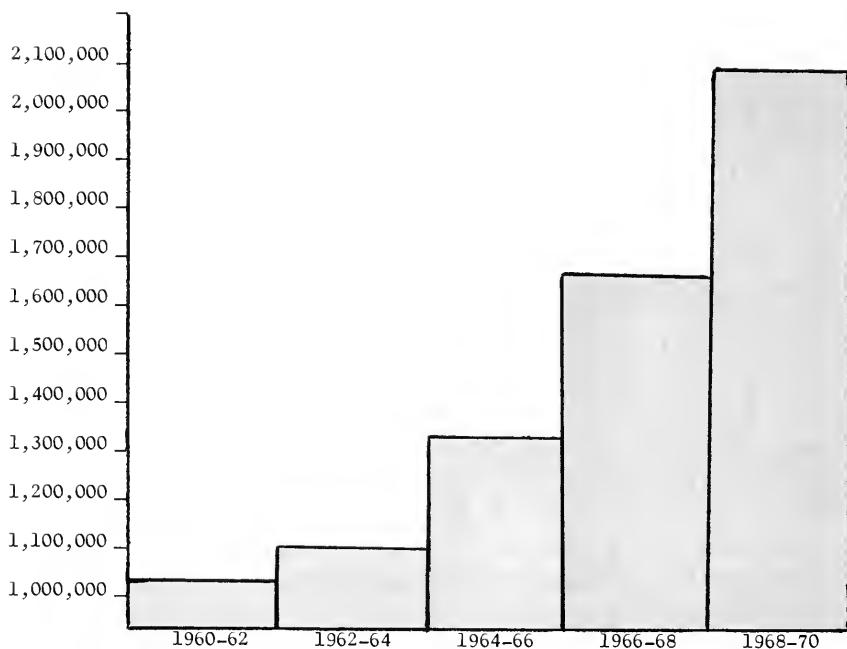
## LABORATORY DIVISION

## TOTAL SPECIMENS AND EXAMINATIONS BY SECTION

JULY 1, 1968 - JUNE 30, 1970

SECTION	1968-69		1969-70		BIENNium 1968-70	
	SPECIMENS	EXAMINATIONS	SPECIMENS	EXAMINATIONS	SPECIMENS	EXAMINATIONS
Biochemistry	127,611	217,104	130,146	263,552	257,757	480,656
Cancer Cytology	146,650	146,650	127,296	127,296	273,946	273,946
Environmental Sciences	37,810	139,505	45,423	168,305	83,233	307,810
Infectious Diseases	429,018	496,673	416,861	465,818	845,879	962,491
Virology	10,071	29,625	16,092	30,370	26,163	59,995
TOTALS	751,160	1,029,557	735,818	1,055,341	1,486,978	2,084,898

## LABORATORY DIVISION

NUMBER OF EXAMINATIONS BY BIENNIUM  
1960-62 - 1969-70

BIENNIUM	NUMBER OF EXAMINATIONS	RATE OF INCREASE
1960-62	1,024,699	8.95%
1962-64	1,115,127	8.82%
1964-66	1,336,440	19.84%
1966-68	1,682,658	25.90%
1968-70	2,084,898	23.90%

78.83 Percent Increase Since 1960-62

### Health Education Section

The Health Education Section promotes those learning opportunities for North Carolina citizens which will enable them to participate more effectively in their own health care. During the biennium, the staff has focused on increasing the numbers of health educators in local health departments, increasing the educational skills of public health and other community health workers, encouraging community and area health planning, facilitating coordination of educational programs, and providing teaching materials.

At the close of the biennium, all budgeted state and local positions were filled. Changes in classifications permitted the employment of three B.S. graduates and two trainees. State staff provided guidance and consultation in the recruitment, orientation, and on-the-job training for these new workers. The Section has provided training for health education personnel through annual conferences, co-sponsorship of a Seminar on Learning and Change, and the Training Programs for Migrant Health Education Aides. The Section works closely with the training institutions: the Chief serves on the Advisory Committee of the Health Education Department at the University of North Carolina, and one staff member supervised three field students from the School. Assistance was provided in establishing the B.S. Program at Western Carolina University and in planning for the proposed program at East Carolina University.

Major staff efforts have been directed toward the training of new public health personnel and inservice education for public health workers. Staff members have served on committees to plan the agency workshops, and the Chief is on the Advisory Committee to the Training Office. A staff member worked with the Nursing Committee to develop the Training Manual, and all have participated in the seminars related to community understanding and the learning process. Also with nurses, a model was developed for designing inservice education and is being used by consultants throughout the state in planning and conducting inservice education. Staff members assisted in conducting the 1968 Institute of Physical Therapy Directors, two workshops for public health dentists, and seminars for home economists in the Maternal and Child Health Projects. The Section has had a part in the development of educational programs to initiate the Nurse Pediatric Screening, the joint Social Services — Public Health Family Planning Project, and Home Health Services. Section staff have helped in planning for and/or in carrying out training with such health related community groups as Migrant Crew Leaders, Headstart Teachers, ESEA Nurses, Teachers

of Migrant Children, Community Development and OEO staff members.

Community and regional health planning has been fostered through the regional offices during the past two years. Staff members have received training in the process and are now beginning to apply their new skills within their regions. Section staff have worked with existing comprehensive health planning groups and provided consultation to developing planning groups within their regions. Much assistance in planning the health component was given to one Model Cities Program. A staff member serves as Chairman of the Agency Task Force on Planning to assist the Planning Office.

Inter-Agency coordination has been promoted through initiation of, or participation in, joint committees on common problems: Health Careers, Migrant Problem, School Health, Sex Education, Smoking and Health.

With increasing training and educational programs in state and local agencies, there has been a growing demand for teaching materials. Section staff has assisted in the production of leaflets and visual aids for use by health personnel. The Section has taken leadership in developing a long-range plan for an agency unit to design and produce the teaching materials needed by state and local health agencies.

The professional staff of the Health Education Section consists of a Chief, three consultants, and part-time assistance of one migrant health education consultant. There is a great need for additional personnel to provide full-time service in each of the six regional offices. Full time consultation is needed to assure the planning and implementation of the educational component in all health programs.

#### **Local Administration Section**

At the beginning of the biennium, all positions in the Local Administration Section were filled with the exception of the Administrative Officer position. John Perkinson transferred from the Immunization Activity Program, Division of Epidemiology to fill the Administrative Officer position on November 1, 1968.

On March 31, 1969, Mr. I. A. McCary, Chief of the Local Administration Section, retired and he was succeeded by John Perkinson. Thomas Johnson returned to the State Board of Health from private industry to fill the Administrative Officer position which was vacated when John Perkinson was appointed Chief of the Local Administration Section.

During each year of the biennium, the Local Administration Sec-

tion allocated funds by formula and in accordance with the policies of the North Carolina State Board of Health for Allocation of State Aid Funds to Local Health Departments as follows:

1968-69	State Aid to Counties Funds . . . . .	\$2,028,824
	Federal Funds, Maternal and Child Health . .	120,000
1969-70	State Aid to Counties Funds . . . . .	\$2,028,824
	Federal Funds, Maternal and Child Health . .	120,000

Total State and Federal funds allocated to local health departments during the 1968-70 biennium were \$4,297,648 or a 10.3 per cent increase over the \$3,897,648 allocated during the 1966-68 biennium.

Local public health funds for 1968-69 were \$11,661,047 and \$13,119,920 for 1969-70. Total local funds for the 1968-70 biennium were \$24,780,967 or a 23.6 per cent increase over the \$20,041,909 total local funds for the 1966-68 biennium. At the close of the 1966-68 biennium the source of funds for local general public health programs was 16.0 per cent state and 83.0 per cent local. At the close of the 1968-70 biennium the source of funds was 13.3 per cent state and 85.9 per cent local.

At the close of the 1968-70 biennium there were 80 local health jurisdictions organized as follows:

Single county units . . . . .	68
Multi-county district units . . . . .	11
Single City unit . . . . .	1

During the 1966-68 biennium the concept of using lay personnel with specialized training in Public Health Administration as administrative heads of local health departments was implemented in North Carolina. This method of providing much needed leadership for local health departments has proven successful and at the close of the 1968-70 biennium 6 local departments were employing non-physician health directors.

Of the 80 local health jurisdictions mentioned earlier, 45 departments are served by full-time medical directors and 14 are served by part-time medical directors. Six departments are directed by the aforementioned non-physician directors. At the end of the 1968-70 biennium, there were 15 vacant health director positions in North Carolina.

During fiscal year 1969-70 there were 1,560 full-time public health personnel positions budgeted in local health departments in North Carolina, exclusive of special project and program personnel.

Of these positions 1,517 were filled. Of the 637 budgeted nursing personnel positions, 620 were filled. Sanitation personnel occupied 329 of the 333 budgeted positions. Of the 340 clerical positions budgeted, 333 positions were filled. The above mentioned positions do not include part-time budgeted positions. For brevity, positions of dental personnel, bacteriologists, veterinarians, laboratory personnel, health educators and others have been omitted.

Public Health Records Unit. The Public Health Records Unit began the biennium with the following staff:

- (1) Mrs. Edna Daughtey, Supervisor
- (2) Miss Dorothea Baird, Records Consultant, Hickory Region
- (3) Mrs. Barbara Mitchell, Records Consultant, Fayetteville Region
- (4) Miss Joyce Davis, Records Consultant, Asheville Region
- (5) Mrs. Rebecca Odom, Records Consultant, Raleigh Region
- (6) Mrs. Edna Sykes, Secretary

In September 1968, Joyce Davis resigned and in December 1968, Jacquelyn Norris rejoined the Agency as Records Consultant in the Greenville Region. Rebecca Odom resigned as Records Consultant in the Raleigh Region in December 1968 and in June 1969 Barbara Mitchell was transferred from the Fayetteville Region to the Raleigh Region. In August 1969, Mrs. Madge Pittman, a long-time employee of the Robeson County Health Department, joined the Records Unit as a consultant in the Fayetteville Region. Mrs. Marion Hale began work as secretary for the Records Unit in May 1969.

The Public Health Records Unit was fortunate to have recruited another person with experience at the local level. Miss Claudine Monteith of the Buncombe County Health Department will join us in July 1970 as Records Consultant in the Asheville Region. Miss Monteith will fill the vacancy created when Jacquelyn Norris resigned to assume duties with the Eastern North Carolina Tuberculosis Association. Also, in July 1970, Mr. Edward Warren is expected to join our staff as Records Consultant in the Asheboro Region. Mr. Warren has many years military experience, much of which was in the area of records management.

During the biennium, consultants continued to provide in-service training for local clerical personnel. Consultants assigned to Regional Offices have received training in the planning process in order that they might ultimately assist local health department personnel in planning. Records Consultants have attended numerous workshops sponsored by Blue Cross in order that they might become more efficient

in assisting local clerical persons with the record-keeping necessitated by Medicare and Medicaid.

Consultants have continued to assist local clerical staffs in updating their records systems. The master card system has been implemented in some counties and consultants have continued to provide assistance in updating TB registers. The Records Unit continues to provide assistance to local registrars as they are concerned with vital records.

The Public Health Records Unit has worked with the Department of Archives and History in revising the County Records Manual. At the close of the biennium the Records Unit was well on its way in developing the Records Management Book, a tool that hopefully will assist local clerical staffs in the area of records management.

### **Nutrition Section**

This period could be accurately called the "hunger" biennium. The State Board of Health has taken a position of leadership among state agencies during this time of growing awareness of the need for better nutrition for many North Carolinians.

The Nutrition Section was represented on an interagency committee, called Opportunity Group II. Governor Dan K. Moore had asked the agencies if reports of starvation and hunger in North Carolina were justified. Although the committee could not answer the Governor's question, it did authorize the Nutrition Section to study the reasons that only about thirty per cent of those known to be eligible to participate in the food programs actually did participate. In a period of eight weeks, interviewers talked with 433 households eligible to participate in the food stamp program and with 462 households eligible to participate in the donated foods program. About half of each group actually participated in the program available to them.

The major findings were that people were embarrassed to ask for assistance regardless of the program offered, that food stamps cost too much, and that transportation was either not available or was too expensive. The findings were reported to Governor Moore, to the United States Department of Agriculture, and to Senator McGovern's Select Committee on Hunger and Malnutrition. Since that time, the food stamp program has been liberalized so that the value of the stamps issued to each household depends upon that size of family alone without reference to the amount of money paid for the stamps.

Still the answer to the question of the extent of malnutrition was not known. When it became evident that North Carolina could not be

included in the National Nutrition Survey, Governor Robert W. Scott asked that the State Board of Health conduct an independent state-wide nutrition survey. A committee including Dr. Ronald Levine, Director of the Community Health Division, Mr. David Corkey, Acting Chief of the Public Health Statistics Section, worked with Nutrition Section staff to develop the objectives and the questionnaire. The Research Triangle Institute was employed to draw a sample of households representing North Carolina. Nutrition Section staff members conducted the interviews and technicians were employed to draw the blood and determine heights and weights of the preschool children in the sample. The Biochemistry Section of the Public Health Laboratory trained the technicians.

The purposes of the survey are to determine the adequacy of the diets of North Carolinians by geographic regions of the state; to determine the effect of income, education, and nutrition knowledge on the diets; and to relate the diets of preschool children to any growth retardation or anemia found within this group.

This work was completed and the data was ready for analysis at the end of the biennium. In addition, plans have been projected for writing the report of the survey and for sharing the results.

At the same time, Medicare regulations were influencing hospitals to strengthen food service departments in several ways, including the employment of dietitians and the adoption of a diet manual. Regional consulting dietitians have recruited dietitians to give the recommended consultation to hospitals and conducted a series of training programs in consultation for those so employed. In addition, they have interpreted to food service employees the services of dietitians to their departments.

The Nutrition Section is represented on a committee of the North Carolina Dietetic Association that is preparing a diet manual for the use of nursing homes and small hospitals. After the manual is completed, the committee will seek endorsement of the State Board of Health, the Medical Society of North Carolina, the North Carolina Hospital and Nursing Home Associations.

#### **Public Health Nursing Section**

The Professional Staff of the Public Health Nursing Section consists of a Chief Nurse, an Assistant Chief Nurse and eight Generalized Nursing Consultants. Three additional Generalized Nursing Consultant positions are budgeted but unfilled due to recruitment problems.



A major responsibility of the Public Health Nursing Section is to work with the nursing personnel of local health departments to assist them in providing quality nursing service in each community. On June 30, 1970 there were 772 budgeted nursing positions in local health departments, an increase of 26 positions over the last biennium. Of these, 71 are designated as administrative or supervisory positions and a large percentage of these have no formal preparation for supervision. The staff of the Public Health Nursing Section provides direct guidance to these nurses and assumes some supervisory activities in locations where there are no supervisors. Currently plans are being developed with a community college and the University of North Carolina School of Public Health to provide educational experiences for the supervisor without preparation.

Of the 701 staff positions on June 30, 1970, 35 were classified as Public Health Nurse Trainees — newly employed nurses without preparation or experience in public health nursing. The majority of training for these nurses is provided by the Generalized Public Health Nursing Consultant. A total of 157 nurses were trained in this program during the last biennium. In 1969, the Public Health Nurse Trainee Program was revised and the **Public Health Nurse Training Manual** was published. Copies are provided to all local health departments and to each trainee as she participates in the one-year training program.

The recruitment, placement, and training of non-professional health workers continues to be of major concern. In 1969 the Public Health Nursing Section published a **Personal Care and Family Aide Manual** which is now available to all local agencies and institutions which employ such personnel. Consultation and guidance is provided by the Generalized Public Health Nursing Consultants.

The Public Health Nursing Section coordinates public health nursing services with all other categorical and special programs. Through direct consultation, in-service education and direct service, the consultants assist in implementing the programs promoted by other sections and divisions within the State Board of Health. The Section develops standards, techniques and procedures for nursing services and assists the local health departments in applying these to the various health programs at the community level. In order to facilitate and improve in-service education and on-the-job training, a model was developed and a manual, **In-service Education: A Conceptual Approach**, was published.

#### Physical Therapy Section

Historically, physical therapists were first employed by the State

Board of Health in the 1940's as a result of two major polio epidemics which affected a sizable segment of the state's population. These therapists were assigned to the Crippled Children's Section to work with the already established orthopedic clinics as well as with itinerate clinics which were set up in the communities throughout the state where there were no other physical therapy services available. In the interim, other sections within the agency — namely, Chronic Disease, Nursing Home, and Home Health Services developed programs in keeping with changes in the patterns of delivery of health services and the changing needs of the population. Recognizing the contribution of physical therapy to these program areas, physical therapists were added to the staff of these sections. These categorical assignments to specific program areas often resulted in fragmentation of service and duplication in travel time and activities within the same geographical areas of the state.

In an effort to better coordinate the functions and services of the physical therapists in the State Board of Health to facilitate provision of a comprehensive physical therapy program, the Physical Therapy Section was established July 1, 1968. The staff consists of a Chief, Assistant Chief, and six generalized consultants. With the initiation of regionalization and decentralization of the services of the State Board of Health, the consultants were assigned to the regional offices. This has encouraged more effective communication and collaboration with other State Board of Health consultants in assessing overall program needs in order to establish priority activities in assisting counties in program implementation. In addition, it places the physical therapy consultants in a more advantageous position to assess the availability of physical therapy resources and the need for physical therapy services within each geographical area of the state.

With the increase in the total population, particularly in the young and older groups, and the increased incidence and prevalence of chronic diseases in these two groups, there has been an increase in the demand for rehabilitative services. Another factor that has influenced the increased emphasis on restorative and rehabilitative services in the total gamut of health care was the implementation of such programs as Medicare-Medicaid which covers services in a variety of health care settings and pays for rehabilitative services for those entitled to such benefits.

The manpower shortage in physical therapy, as in other health professions, is acute in North Carolina. A survey in 1968 revealed 34 per cent of the positions in hospitals were unfilled. Considering the increased awareness of the scope of conditions benefiting from physical therapy and efforts to employ therapists in all health care settings, the

shortage becomes even more evident. Physical therapy services are available in only 35 of the one hundred counties in the state. Approximately  $\frac{2}{3}$  of the 200 practicing physical therapists in North Carolina reside in the central  $\frac{1}{3}$  of the state. Thus, only minimal services are available to over 40 per cent of the population. Of the 32 westernmost counties, excluding Buncombe, there are only 8 physical therapists and these practice in 4 counties. In the 37 eastern counties, there are 15 physical therapists and these practice in 9 counties. Limited patient care consultation is provided by the State Board of Health consultants in those areas where there are no other physical therapy resources.

The uneven distribution and insufficient number of therapists to meet the needs of the patient population in North Carolina led us to identify the overall goal of our Section: To expand the availability and enhance the quality of physical therapy services in North Carolina. During the past biennium, members of the Physical Therapy Section have undertaken a variety of activities designed to contribute to the ultimate achievement of this goal. Some examples of these activities are:

1. Consultation to other programs within the State Board of Health and agencies and facilities providing patient care services.
2. Assistance to extended care facilities or home health agencies in obtaining the services of a physical therapist.
3. Interpretation of the Medicare-Medicaid laws and Conditions of Participation, particularly as related to physical therapy.
4. Assistance in the establishment of one of the first training programs for the Physical Therapy Assistant, as well as effecting revision of the State Practice Act to include licensure for these technically trained workers.
5. Teaching in the Physical Therapy schools in North Carolina (3), The School of Public Health, the Physical Therapy Assistant Program and providing a supervised field affiliation with our section as a part of the student's clinical training.
6. Participation in the training programs for other health workers; i.e., Physicians' Assistants, Public Health Nurses, A.A. Nursing Programs and supportive personnel.
7. Participation in workshops designed to improve the abilities of ourselves and other physical therapists in the areas of administration, supervision, and planning.

Considerable time and effort have been spent working with two of the regional health planning councils in North Carolina; namely, the State of Franklin and the Eastern Appalachian Health Councils, in an attempt to assist them in developing operational plans for the inclusion

of physical therapy services as a component of an overall health program. These plans form the basis for a grant request for funding in order to implement the program. Members of our staff serve on an advisory committee to a Continuing Education Project for Physical Therapy sponsored by the Regional Medical Program and participate in the Comprehensive Stroke Training Program provided for community health workers, which is also sponsored by the Regional Medical Program. These contacts, plus active participation in the work of professional organizations such as the North Carolina Public Health Association and the North Carolina Physical Therapy Association provide additional opportunities to promote standards of practice, encourage involvement of traditionally hospital based physical therapists in total community physical therapy services, and serve as a mechanism whereby we can maintain, on a current basis, the central file we have established to match vacant physical therapy positions with inquiries for employment from therapists both in and out of the state.

The members of this Section have realized a need for our own continued education to keep abreast of changing technology and to improve our skills in order that we may function more efficiently and effectively as a total program consultant rather than as a patient care consultant which had been our primary role prior to the formation of the Physical Therapy Section. To meet this need, we have attended a number of workshops, seminars, and short courses during the last two years to gain new information and assist us in our endeavor to develop training manuals for use in our teaching activities in two areas: Child Growth and Development, and Basic Restorative Services.

In summary, the Physical Therapy Section of the Community Health Division utilizes many avenues such as professional organizations, individuals, all types of health care facilities, and educational institutions in our efforts to effect, in a positive manner, the availability of quality physical therapy services to the population of North Carolina.

### **Migrant Health Project**

The purpose of the Migrant Health Project is (1) to provide consultative services to local health departments, voluntary community organizations and related groups to meet the needs of migrant farm workers, (2) to continue to stimulate, organize and develop community health service clinics and other activities emphasizing health and medical care for migrants and their families. Dr. Ronald Levine is the Director of the Project; Elizabeth Berryhill, Consultant (Greenville); Amin Khalil, Consultant (Raleigh); and Robert Benton serves as sanitarian consultant.

During the biennium, a new local migrant health project for Wilson, Nash, and Greene Counties was approved. Federal funds were discontinued for Carteret, but services were maintained for migrants there with State funds.

The State Migrant Health Project continued to work closely with the local migrant health projects in the Albemarle area (Elizabeth City), Sampson, Carteret and Henderson Counties. The State Project also assisted non-project counties with migrants to offer services geared to the needs of migrants. Health aides were employed by the project and placed in Carteret, Sampson, Johnston, Wilson, Elizabeth City and Duplin.

A grant from the State Emergency and Contingency Fund enabled the State Board of Health to hire, in the past two seasons, nineteen sanitarian aides who helped local health departments and local migrant health projects improve living conditions in migrant camps.

The State Migrant Health Project participated in the training of eighty crewleaders during the biennium. A two-week health training program was held for each group of crewleaders. Simultaneously, the Project sponsored the training of crewleaders' wives.

A state-level Advisory Committee was formed with membership from the many agencies serving migrants in North Carolina. One of the accomplishments of the Committee was the planning of a state-wide Conference on Migrant Services with the theme of "Better Coordination on the Local Level."

The Project intensified its consultation services to local communities in the areas of planning, program development, training and other aspects of migrant health services. New innovations were attempted in the areas of case-finding and community organization.

#### **Health Mobilization Section**

In an effort to increase our Emergency Medical Stockpile Resources, a major portion of our activities during the time period of this report involved the promotion of the Packaged Disaster Hospital Affiliation and Hospital Reserve Disaster Inventory programs among selected community hospitals.

The PDH program provides the community hospital with the supply capability to expand their hospital operations by 200 beds and to operate without resupply for 30 days. In order to participate, hospitals are required to accept administrative responsibilities for the develop-

ment of utilization plans, training programs designed to prepare staff to function in these units, and to rotate the short shelf-life items.

The HRDI program complements the PDH program and provides the community hospital with a 30 day supply of critical medical/surgical items to support their existing beds.

A total of 161 visits were made to 82 hospitals to negotiate PDH/HRDI contracts with hospital officials. Contracts were effected with 31 hospitals for the affiliation of 20 PDH's and the prepositioning of 22 HRDI units. However, due to the limitation of the Federal budget for stockpile procurements, stockpile activities were substantially curtailed. Of the 22 HRDI units requested only nine were prepositioned. Although contracts were negotiated for the affiliation of 20 PDH's, only eight had been scheduled for refurbishment during the time period of this report. Of the eight scheduled, only four were updated. However, two additional 30-day supply PDH's were requested and prepositioned in the Wilson and Wilmington areas.

The placement of the nine HRDI units, plus the four PDH's refurbished, and the two new PDH's prepositioned, provided sufficient disaster supplies for a net increase of 43,300 patient days.

A survey program on PDH rotatable items and HRDI units were implemented during the period covered by this report. Every six months surveys are made of the rotatable items to determine compliance with contracts and to assist with problems encountered by hospital officials. Those hospitals unsuccessful in their attempts to rotate have been especially benefited by this program because the surveyor has the opportunity to share with them the methods employed by those hospitals that have been successful.

A total of three inspections were made of the PDH/HRDI rotatables in each of the 34 participating hospitals. The problems encountered during these visits indicated that hospital officials were not as knowledgeable about rotation procedures as had been assumed. In order to make officials more knowledgeable, a two-day seminar was conducted in Chapel Hill by the North Carolina Pharmaceutical Association. Emphasis was placed on procedures utilized by these hospitals having successful rotation programs.

North Carolina has approximately 130 candidate hospitals eligible to participate in the PDH/HRDI programs. To date, only 52 are participating to an appreciable degree. A minimum of one field consultant should be available to devote full time in promoting acceptance by

the remaining hospitals and to make periodic inspections of rotatables and to provide consultation to all participating hospitals.

Critical storage deficiencies existed at several of our PDH storage locations. These deficiencies included poor security, fire hazards, improper stacking, lack of dunnage, broken cartons requiring repackaging of pillows, blankets, etc. PDH's in six counties were relocated and properly stacked on lunnage and items repackaged as necessary.

A total of 47,490 persons were trained in Medical Self-Help during this period. This represents a net decrease of 36,634 compared to the number trained during the period 1966-1968. This significant decrease was due to the loss of Federal grant monies available to provide a full time position to promote this program. It is unlikely that the momentum once enjoyed by this program will be regained unless a full time position can be restored.

This program has already been introduced in the secondary school systems of 96% of our counties. School consolidation, an unusually high rate of personnel turnover, require frequent visits to schools in order to coordinate all aspects of the program.

Another important training activity involved the preparation of professional personnel in the performance of their emergency roles. A total of 15 Disaster Nursing Workshops were conducted in conjunction with the American National Red Cross. Sponsored by the Red Cross, these workshops were designed to prepare the nurse to perform her role at the scene of an emergency.

A PDH Familiarization and Orientation program was conducted in conjunction with Pitt Memorial Hospital. This exercise involved county officials, hospital personnel, health department and other governmental agencies and private sectors having a supporting role to Emergency Health Services.

As a training aid, PDH Training Kits were delivered and reviewed with appropriate officials in 23 hospitals.

## **DENTAL HEALTH DIVISION**

### **Biennial Report**

**July 1, 1968 — June 30, 1970**

During the biennium, the Dental Health Division continued to direct program efforts toward achieving the overall objective of promoting better dental health for the people of North Carolina. Methods used to achieve this goal were prevention, education, diagnosis, treatment, research, and evaluation. Major activities of the division were:

#### **Prevention**

During the biennium, nine new towns began fluoridating their water supplies. On June 30, 1970, 63 municipal water supplies supplying 96 towns were fluoridating. This represents 75.6% of the population served by municipal or sanitary district water supplies (37% of the total population).

The division's field staff provided topical fluoride applications for 30,786 indigent school children.

School fluoridation was initiated in six rural schools, furnishing fluoridated water for 6000 school children.

Oral cancer screening and referral clinics were conducted in eight counties.

#### **Education, Consultation and Training**

Printed dental health information was provided for 199,290 school children and 6,630 teachers. Classroom lectures were provided by staff dentists to 186,176 children.

All dental health educational material produced by the division was reviewed and five pieces were revised.

Seventy-two programs, conferences, and consultations on dental health were provided upon request for health workers, teachers, private practitioners, and others by the professional staff of the division.

Consultant staff lectured on dental public health to students of dentistry, dental hygiene, and public health at the University of North Carolina at Chapel Hill and in the community college system.

Staff members provided consultation services to local health departments, Headstart programs, migrant programs, school health programs, and Title I (ESEA) programs. The division provided major consultation services to the North Carolina Dental Society in the continued implementation of Title XIX. These services



were provided primarily through the regional dental consultants who are assigned to the regional offices of the State Board of Health.

The division continued the residency training program with two trainees in residence during the biennium. The Council on Dental Education of the American Dental Association granted full approval of the division's residency training program.

All professional staff attended at least one conference or continued education course during the biennium.

## Diagnosis and Treatment

Treatment of indigent school children and referral follow-up remained an important part of the division's school program. However, the field staff continued to emphasize primary preventive measures (prophylaxes and topical fluoride applications).

The division and the University of North Carolina School of Dentistry continued the program of providing dental care for indigent preschool children. These programs were authorized by the North Carolina State Board of Dental Examiners and were conducted under the supervision of the division. Rising senior dental students provided care for indigent preschool children in nine counties.

## Research and Evaluation

The division continued its research program related to the effectiveness of fluorides in reducing the incidence of dental decay when applied topically and when taken as a daily dietary supplement. A new study sponsored by the U. S. Public Health Service was begun in a rural eastern North Carolina county.

Baseline data was collected for the six school fluoridators operated by the division. Also a study was completed to determine the technical feasibility of fluoridating school water supplies.

### DIVISION OF DENTAL HEALTH PERFORMANCE STATISTICS

	1968-69	1969-70
Average Number of Dentists .....	22.62	22.45
Average Number Total Personnel (including dentists) .....	38.19	37.41
Number of Counties Receiving Dental Programs .....	46	51
Number of Weeks of Services to Counties .....	1124	1117
Number of Weeks of Services to Institutions, etc. ....	2	20
Number of Lectures Given in Schools .....	3496	3376
Number of Children Attending Lectures .....	94,220	91,956

Number of Mouth Inspections .....	100,273	98,198
Number of Children Needing Dental Care .....	49,379	49,266
Number of Children Referred to Private Practitioners .....	26,037	24,298
Number of Indigent Children Treated .....	19,511	18,725

### ITEMIZED TREATMENTS

Amalgam Fillings .....	20,885	22,290
Silicate Fillings .....	890	997
Cement Bases .....	10,682	11,336
Prophylaxes .....	16,841	15,430
Topical Fluoride Treatments .....	16,202	14,584
Teeth Extracted (Deciduous) .....	10,886	9,763
Teeth Extracted (Permanent) .....	3,065	2,906
Silver Nitrate Treatments .....	4,310	3,108
Other Operations .....	2,190	2,873
Total Operations .....	85,951	83,287

## PERSONAL HEALTH DIVISION

### Biennial Report

July 1, 1968 — June 30, 1970

Reorganization, program additions and adjustments as well as changes, growth and refocusing of staff were major elements of Personal Health Division activities during the biennium.

In July 1968, the Nutrition Section was transferred to the Community Health Division. The physical therapists of the Chronic Disease and Crippled Children's Sections were also transferred to Community Health where a new discipline section was organized. The Home Health Services Program and staff were transferred to the Chronic Disease Section from Community Health Division.

In July 1968, a Genetic Counseling Program was initiated through funds provided by the 1967 General Assembly. The program is a cooperative one between the Maternal and Child Health Section and the University of North Carolina School of Medicine.

The General Assembly designated the State Board of Health as responsible for standards, consultation and certification of the Medicaid, Title XIX, Program. This was effective January 1, 1970, and was assigned to the Personal Health Division where it was combined with the Medicare, XVIII, Program resulting in the reorganization and redesignation of the Health Insurance Benefits Section as the Medicare-Medicaid Standards Section. A formal cooperative agreement between the State Board of Health and the Department of Social Services has been achieved regarding Medicaid.

In April 1970 the Chronic Disease Section accepted responsibility for the Cancer Registry which was transferred from the Regional Medical Program.

In December 1969 the Maternal and Child Health Section was reorganized due to its size and broad range of multiple programs into three Sections. Dr. E. Robert Neely was appointed chief of the new Mental Retardation Section, Dr. Ann H. Huizenga, chief of Maternal Health Section and Dr. John T. King, chief of Child Health Section.

Dr. Ruth Burroughs was appointed chief of the Crippled Children's Section in October 1969, replacing Dr. Victor Skerrett.

In 1969 a new, formal cooperative agreement was written between the Department of Social Services and the health care programs of Cancer, Crippled Children's and Maternal and Child Health. Also an agreement was achieved between Maternal Health Section and the Department of Social Services regarding the provision of family planning services. The Department of Public Instruction, Division of Vocational Rehabilitation entered into a new formal cooperative agreement regarding health services with the Chronic Disease Section, Crippled Children's Section, Maternal Health Section, Mental Retardation Section and Child Health Section.

During the biennium, the Division Office was organized to include in addition to the Director, a division health administrator, a division nursing coordinator and a division social work coordinator as well as a chief secretary for the division.

A substantial amount of specialized training was received by the members of the Division. Twenty top staff members received management development training. Other inservice training related to consultation, planning and legal aspects of health was received. Seven members of the Division were accepted as candidates for a Master's in Public Health in a special Raleigh off-campus degree program provided by the School of Public Health at the University of North Carolina in Chapel Hill and sponsored by the State Personnel Department, the State Board of Health and the Public Health Service.

### **Crippled Children's Section**

This biennium showed no change in the Crippled Children's policy of providing diagnostic, medical and surgical care for children with congenital or acquired handicapping conditions. However, due to increased costs, certain services had to be curtailed. These were surgical procedures for cosmetic reasons and orthodontics in cases other than

cleft palate or those cases of scoliosis whose Milwaukee braces caused orthodontic problems. Also the outpatient drugs provided by the program were limited to those for care of heart conditions, cystic fibrosis and convulsive seizures. The increased costs were due largely to a change in the State policy permitting payment of reasonable costs for hospital service rather than 90% as before. Costs of appliances rose also during this period.

Nevertheless the total number of children receiving care increased from 20,304 in 1968 to 21,073 in 1969. Cooperation between the Crippled Children's Services and the Departments of Social Services, Special Education and Vocational Rehabilitation have ensured better patient care without duplication of service. Particularly helpful is the recent program developing in the Department of Special Education of providing speech therapy in the schools and, in some cities, language training for the hearing handicapped pre-school child.

In March 1970, as in the spring of many previous years, funds were exhausted for hospital care except in the case of emergencies. It is hoped that additional funds plus better distribution will bring a solution to this problem in the future.

Within the Personal Health Division there has been better coordination of efforts. Physician, nurse and social work consultants now function in Maternal, Child Health and Crippled Children's programs jointly, and effort is being made to see that all children are seen in a local pediatric conference before referral to a specialized Crippled Children's clinic.

Progress has been made to unify billing services of the Maternal and Child Health, Crippled Children and Chronic Disease Sections. Since the greatest amounts of work in this area are by the Crippled Children's Section, great effort was expended toward simplifying the procedures and getting all records current in this Section.

A new form for requesting and authorizing service was developed in the first year of the biennium. This form, which permits information on family finances to be obtained where the form is initiated, has saved patients the burden of visiting the welfare department for certification and has eliminated much of the red tape involved in getting help for the handicapped child. The Crippled Children Section by the end of the biennium was proud of the fact that all of the backlog in authorizing service had been eliminated.

For some time the method of rostering physicians, especially orthopedists, had been a subject of question and criticism. This subject

was considered by the State Board of Health and in May, 1970, Dr. Raper, president of the Board, asked Dr. Louis Shaffner, president of the Medical Society of the State of North Carolina, to appoint an Advisory Committee on Rostering. This committee, headed by Dr. Jack Hughes of Durham, was appointed but had not met by the close of the biennium.

### **Chronic Disease Section**

**Cancer Program.** During the past two years, the Chronic Disease Section has initiated four new Cancer Detection Clinics. The number of persons being screened in the Detection Program has increased by 35%, with more than 12,000 persons being screened in fiscal year 1970.

The Chronic Disease Section has assumed the responsibility for the development and maintenance of a state-wide Cancer Registry. The North Carolina Regional Medical Program is assisting in the development of the Registry and providing financial assistance during this fiscal year.

**Multiphasic Screening Program.** Multiphasic Screening, although still considered experimental, was expanded from five centers (Durham, Roxboro, Asheville, Sylva, and Charlotte) to nine centers, during the past two years. Added were Brevard, Oxford, Clinton, and Greensboro. Contacts have been made with local Health Departments in Concord, Winston-Salem, Statesville, Shelby, Morehead City, and Hendersonville.

The Multiphasic Screening seems to gain in popularity among the public and medical societies and is rapidly gaining in importance. The Chronic Disease Section has worked in close contact with local medical societies in order to achieve its goal.

The necessary equipment for screening was provided for the local centers by the N. C. State Board of Health. The State Board of Health also provides laboratory facilities to process the blood chemistries submitted by the clinics. Part-time salaries for additional personnel are provided, as well as appropriate inservice training, presentations, and instructions.

The two successful years of Multiphasic Screening were evaluated statistically and valuable conclusions have been drawn from the study. The material is currently being prepared for publication. As of today over 24,000 screenees have been processed.

**Home Health Services Program.** There are 26 Home Health Agencies in North Carolina. All but five of these operate out of the county health departments. These 26 agencies provide services in 32 counties

and serve a population of approximately 2.4 million or about 48% of the State population. All of these agencies are approved for reimbursement by Medicare and Medicaid. Services offered usually include, but are not limited to, nursing care, physical therapy, and the services of a home health aide.

Other agencies and health departments not certified for reimbursement by Medicare and Medicaid also provide limited bedside services in the State.

**Glaucoma Program.** During the past biennium three permanent Glaucoma Screening Clinics, using specially prepared nurses instead of ophthalmologists, were successfully started in local health departments; and plans are now being made for at least three more clinics to be implemented in the current fiscal year. These new clinics alone will allow us to more than double our present screening productivity of 8,000 per year. Additionally, six mass Glaucoma-Diabetes screening clinics will be conducted each year to supplement the permanent clinics.

**Diabetes Program.** Diabetes screening is now being conducted in 95 counties in North Carolina. In the past two years, over 55,000 persons were screened for diabetes and 400 new cases were diagnosed. In addition to our present Diabetes Screening Program, Diabetes detection will be an important part of our growing Multiphasic Screening Program.

#### **Medicare-Medicaid Standards Section**

The name of the Health Insurance Benefits Section was changed in December 1969 to reflect the addition of responsibilities under the Medicaid (Title 19) Program. The agreement between the State Board of Health and the North Carolina Department of Social Services, provides that all certification of Title 19 facilities, consultation to these facilities, and medical review under the program, will be accomplished by the section staff.

April 1970 saw an additional function to be performed — that of civil rights compliance reviews for all health facilities and local health departments. This transfer of responsibility from the federal Office of Civil Rights also includes the investigation of complaints under Title VI of the Civil Rights Act of 1964. A Civil Rights Coordinator has been employed to carry out this function.

The major work load of the section has been in the resurvey of the facilities participating in Titles 18 and 19. Particular attention has

been devoted to more in-depth surveys in order to improve the delivery of care in health facilities. The number of certified facilities as of June 30, 1970, was:

Acute General Hospitals . . . . .	145
Psychiatric Hospitals . . . . .	5
Independent Laboratories . . . . .	14
Home Health Agencies . . . . .	27
Extended Care Facilities . . . . .	51
*Nursing Homes . . . . .	55
*Medicaid Only	

Cooperative effort between the section, Blue Cross-Blue Shield, Inc., and the Medical Society of North Carolina, to improve utilization review in hospitals and extended care facilities, has been intensified. Increased emphasis on this area is being required from the federal level and more staff time is necessary to effectively monitor utilization review activities.

Staff has increased to reflect the additional programs of Medicaid and Civil Rights. Two clerical and ten professional positions have been added.

### **Nursing Home Section**

At the beginning of July 1968, there were 71 nursing homes and 32 combination nursing homes and homes for the aged licensed in North Carolina with a total of 5,575 nursing beds and 1,612 resident beds. At the present time, we have 74 nursing homes and 39 combination nursing homes and homes for the aged with a total of 7,219 nursing beds and 1,909 resident beds. The majority of the nursing homes and combination homes are licensed for skilled nursing care; however, 4 are licensed for intermediate nursing care in accord with new Rules and Regulations adopted January 1, 1970. The 113 homes are located in 49 counties ranging from Pasquotank in the east to Haywood in the west.

During the two-year period, 18 new homes have been licensed and several have expanded their facilities. Following the implementation of the Title XIX — Medicaid program in North Carolina on January 1, 1970, five licensed nursing homes changed to homes for the aged are now licensed by the North Carolina Department of Social Services.

There are currently 10 new homes under construction with a total of 886 beds. Three existing homes have additions under con-

struction with a total of 126 beds. This makes a total of 1,012 beds presently under construction.

The nursing home program is continually changing: homes are larger; they are more likely to be a part of a multi-home corporation; many select to meet Federal Medicare and Medicaid standards; most provide a wider range of services; and they are more sophisticated as institutions.

To help homes meet licensure requirements and to help improve patient care, our staff devotes much of its time to educational programs for the nursing home staffs. The Section participates in training programs held in the homes and in educational institutions, such as universities, community colleges and technical institutes. These training programs are concerned with nursing care, physical and occupational therapy, nutrition, housekeeping, and management.

With the wide community emphasis on bringing nursing home care more clearly into the overall community health system, the Section is increasingly aware of the need to upgrade levels of care through education.

### **Mental Retardation Section**

The number of Developmental Evaluation Clinics has not changed since the previous report and remains at 12, but the number of patients seen and service to patients continues to expand. New admissions in FY 1969 totaled 1083 with active cases totaling 3600 which was a 15% increase in the number of active cases over the previous year. In FY 1970 new admissions totaled 1353 with active case load totaling 4446 which is almost a 25% increase in the number of active cases. At present over 95% of the total state population is within a 50 mile radius of a Developmental Evaluation Clinic. A recent HEW report indicated that Developmental Evaluation Clinics in North Carolina had more admissions than any other state and that the state ranked second in the number of patients in various stages of evaluation. An expansion in the number of clinics was not possible due to inadequate funding. The Genetic Counseling Program which was started at the University of North Carolina to further meet the needs in the mental retardation area continued to function in a limited capacity and expansion was hampered by failure to obtain a director with the necessary genetic background. Members of the staff have been active in meetings with other interested agencies in the area of improvement of day care for children and have acted as consultants to the staff of the task force of the study commission on emotionally disturbed children.



In the area of Metabolic Screening the diagnostic program for phenylketonuria (PKU) is reaching approximately 95% of the newborn with about 90% being tested through the State Board of Health Program. To date, 16 cases have been identified through the program. The addition of tyrosine screening as a comparison test for phenylalanine has improved the efficiency of the program.

The Premature Program continued to function as in the past and the number of premature centers did not increase from the 12 previously established. Training for approximately 80 physicians and about 40 nurses was sponsored under this program. Plans are underway to redirect the emphasis of this program and preliminary studies were begun during the latter part of the reporting period. Consultation to hospitals in the area of newborn care continued to receive emphasis and about 50% of the hospitals are receiving this service.

#### **Child Health Center**

A key Program in this area is the Screening and Supervisory clinics in the pediatric care field. At the end of the last biennium, this program was being supported in 45 of the counties and during the current biennium emphasis was continued in this program in an effort to expand it and to increase the quantity and quality of care. Several new clinics were started in fiscal year 1969 and a B Budget request was submitted to the state legislature for funds to start the program in 25 additional counties in FY 1970. However, amount of funds appropriated was not sufficient to do this, but program was started in additional counties and at the end of the biennium 57 counties were receiving financial support for this program with a number of others adopting the concept. All counties receiving support were required to write plans outlining procedures to be followed under program at the beginning of the 1970 fiscal year. During the latter part of the biennium, a great amount of work was done on a grant proposal entitled, "Expansion of the Child Health Nurse Practitioner Role" and this was submitted to HEW in June 1970 for funding. If funded, training provided by this grant will greatly enhance the capability of the nurses in the pediatric area and will increase the quality of care which is already considered very good.

The Maternity and Infant Care Project which is a Special Project funded by HEW on a 75-25% matching basis continues to function in the three county area of Halifax, Wayne, and Warren Counties. The Chief of the Child Health Section continues as the acting project director which as the name implies provides comprehensive prenatal, natal, and postnatal care for mothers and care for their children up

to one year in the three county area. Funding for this project has remained fairly constant during the biennium and rising cost for care and personnel has prevented any expansion into other counties of the state. The Project provides much needed care in the three counties which would not otherwise be available and in general has greatly enhanced the overall health and welfare of the mothers and children. A 9-month training program for family planning aides who work with the project was conducted by the Halifax County's Technical Institute during FY 1970. Although some progress has been made in the School Health Program, it remains somewhat fragmented with the major component of the program being vested in the local health department. During the biennium financial support was provided for dental health services and for the purchase of vaccine in the immunization program. Some action has been taken to bring about a closer coordination of the programs of Child Health and the Crippled Children's section with those of the Department of Education. Plans were made to established a pilot school health program as a model for state-wide implementation and these are still being pursued. Good progress was made in coordinating Speech and Hearing Program across the state.

### **Maternal Health Section**

The area of Family Planning continued to receive major emphasis throughout the biennium, and a major milestone was reached in the area of family planning and family life education when two all-day coordinating conferences were held in the fall of 1968 which involved participants for all agencies and organizations with an interest in the area. The staff of what was then the Maternal and Child Health Section played a major role in planning these conferences and editing and publishing the proceedings.

In the fall of 1969, the staff had a major role in drafting an agreement between the Department of Social Services and the State Board of Health whereby Social Services would purchase family planning services from the local health department for certain AFDC recipients as required by Title IV of Social Security Laws. In addition to the agreement, the staff helped formulate plans and guidelines to assist the local departments of social service and health departments to write plans as required by the law and also participated in several statewide orientation sessions to explain procedures. As of the end of June 1970, approximately 50 counties had submitted plans. Consultation and guidance is being given local health departments in the writing of these plans.

The statewide family planning project which was mentioned in the previous report was not funded by HEW although three special family planning projects have been approved. These were in Charlotte and Winston-Salem and in the Nash-Edgecombe counties area. A special project was submitted by Gaston County but has not yet been approved. There has been an increasing awareness of the educational needs of the pregnant school-age teenager and special programs have been developed in several areas to help alleviate this problem.

The number of family planning patients in health department clinics increased approximately 15% during FY 1969, and although figures are presently being compiled for FY 1970 preliminary figures indicate almost a 36% increase in the number of family planning patients over the number shown at the end of the previous fiscal year. The shortage of physicians to hold clinics has been a problem in a few areas. Conferences were held with other agencies interested in family planning such as OEO, Population Center, Social Services and Department of Local Affairs, and it is hoped that a more coordinated comprehensive program will emerge than has been the case in the past. Work on a statewide family planning reporting system continued with anticipation that something concrete will result in the near future. This has been hampered somewhat by a lack of clearcut federal guidelines. In the spring of 1970, a B Budget request for state money for federal planning was submitted for consideration by the next legislature.

At the beginning of the biennium approximately 74% of the counties were offering or conducting clinics for prenatal, postnatal and family planning services. There was 8-9% increase during FY 1969 and it is estimated that close to 90% of the local health departments have this comprehensive service available as of the end of FY 1970. New clinics are being financially supported commensurate with funds available, and we are continuing to push for a better quality and standard of care in this area; and, while difficult to measure, we believe improvements are being made. A small increase was noted in the number of hospital deliveries while the number of births remained about the same.

## **SANITARY ENGINEERING DIVISION**

### **Biennial Report**

**July 1, 1968 — June 30, 1970**

The Sanitary Engineering Division is responsible for the development and coordination of all non-medical activities of the State Board of Health in the field of environmental sanitation. These activities are administered through five Sections within the Division.

The Division's objectives have been and continue to be the improvement of environmental conditions that affect the health and comfort of the people of the State, and to coordinate with local health departments the enforcement of General Statutes relating to sanitation. To accomplish these objectives, the personnel work with representatives of industry, organized community groups, professional groups, municipal and county officials and with a large number of other agencies.

As has been mentioned in previous reports, rapid changes are taking place in our way of living which have focused attention on a number of environmental problems. With limited personnel, we have attempted to meet these emerging problems, but limited resources have prevented us from adequately meeting the demands placed upon us.

The problem of the development of community water supplies continues to be one of our major problems. There has been a large increase in the number of public water supplies due primarily to expansion around the fringe areas of municipalities, development of subdivisions in rural areas and construction of mobile home parks. It is the legal responsibility of the State Board of Health to approve these supplies, and we find that many have been installed without our knowledge and without approval. Request will be made to the forthcoming General Assembly for additional personnel to enable us to fulfill this responsibility.

A second problem of major concern has been solid waste collection and disposal. During the biennium considerable effort has been put forth by the staff in working with municipalities and counties in an effort to find ways and means of handling the uncontrolled disposal of garbage and refuse throughout the State.

A brief summary of some of the major activities and accomplishments of the five Sections follows:

### Engineering Section

The intent of Chapter 130, Article 13, General Statutes of North Carolina, is to insure that all public water systems are designed, maintained, and operated according to acceptable public health engineering practices, thereby providing dependable, safe, and wholesome water supplies for the citizens of North Carolina. In seeking compliance with this Statute, the Engineering Section personnel make investigations and sanitary surveys of sites for proposed water supply facilities, and they make visits, inspections, and investigations of existing water systems their primary functions. The Engineering Section personnel consult with engineers, municipal officials, water system operators, and others regarding needed improvement to existing water supplies and proposed new supplies. There are presently under our surveillance some 1920 public water supplies of all types within the State, an increase of more than 33 percent during the biennium.

The activities of the Section include the investigation of sites for proposed water works facilities and waste water treatment facilities which discharge into streams classified for use as raw water for public water supplies. Some of the advances in public water supply developments during the biennium were new water systems at Alexander County, Harkers Island, Hatteras-Buxton, Bannker Elk, Iredell Water Association, and Orange Alamance Water Association. Duke Power Company's water plant at Spindale was enlarged, and new water treatment plants have been constructed in Mount Airy, Fayetteville, Raleigh, Dunn, and Greensboro.

Investigations were made for new ground water supply systems to serve some 400 small communities, mobile home parks, and rural areas in the State.

Fluoridation programs were started at Canton, Drexel, Waynesville, Jamestown, Umstead Hospital at Butner, Elkin, and Mocksville.

Lyon's Station Sanitary District near Creedmoor in Granville County was created and the boundaries extended for the Kannapolis and Sedgefield Sanitary Districts.

The number of county-wide water systems now include Anson, Mecklenburg, and Forsyth Counties. Also, a large number of the counties are studying the feasibility of county-wide systems.

The Section is also continually involved in many other varied projects and programs such as the State Planning Task Force on Appalachia, the Sub-Task Force on Recreation, Comprehensive Health Planning, assistance and advice to local health departments, providing

emergency water treatment facilities and technical advice for the Town of Bessemer city, sanitary surveys of watersheds, and many others.

Legislation, enacted in 1969, requires certification of all water treatment plant operators. Members of this section have been assisting with this program.

The increase in population and industrial activity promote more waste water which is more complex in quality and greater in quantity while demanding at the same time potable water supplies producing more water of higher quality than ever before. We cannot emphasize too strongly the need for sufficient personnel in this activity to enable the State Board of Health to discharge its legal responsibility in the field of public water supply protection.

### **Plan Review Section**

The Plan Review Section was formed early in 1968 as a separate Section whose primary responsibility would be directed toward the review of plans and specifications for construction of water systems, waste treatment systems, hospitals, food handling establishments and related facilities submitted to the Division. The number of plans for hospitals, rest homes, food handling and other related projects received and reviewed during the biennium rose to 378, an increase of 40% over the previous biennium. Also, the number of plans for water supply and sewerage projects received and reviewed during the biennium rose to 867, an increase of 18% over the previous period.

The Association of General Contractors lists contracts awarded in the State during the biennium in the following amounts:

Water Works .....	\$39,269,684
Sewage Works .....	33,427,924
Water Works & Sewage Works	
Combined contracts .....	9,798,563

The amount for sewage works is equal to the previous biennium. The amount for combined contracts is approximately 50% of the previous period. The amount for water works improvements however, is down to only two-thirds of the amount for the previous biennium despite rising costs and despite the widespread water shortage problems that developed during the drought in the fall of 1968. This reduction in spending for major water supply facilities may lead toward more severe water shortages in the near future unless the trend is reversed. During the period only Kings Mountain, Sanford, Smithfield, Mooresville, Mt. Gilead, Roanoke Rapids and Manteo awarded major water supply and treatment contracts.

Even though amounts spent on major projects decreased, the number of plans received and reviewed increased, this largely due to marked increase in the rural community, subdivision and mobile home park water system field. Of the 1,780 public water systems now on record in the State, over 1,300 are of this type. Also contributing to the increase in the number of plans received are the new consolidated county schools and the industrial and community waste treatment plants discharging into raw water supply streams.

During 1969 it became necessary to amend our policy regarding review of swimming pool plans due to a lack of engineering personnel. Local health departments were advised that we could no longer review these plans and specifications for them, and, for the present, with the exception of State properties, swimming pool plans are not reviewed by the Plan Review Section. Also, during a short period near the end of 1969, it was necessary to call upon the Engineering Section for assistance in review of plans until two new engineers, Mr. Thomas M. Thompson and Mr. Gene B. Cobb, were added to our staff.

Plans and specifications were approved for the food service and sanitary facilities for seven new hospitals located in Jefferson, Williamston, Winston-Salem, Roanoke Rapids, Tryon, Edenton and Thomasville. Plans for various additions and improvements were approved for twenty-two other hospitals.

### **Radiological Health Section**

The Radiological Health Section is responsible for administering the responsibilities delegated to the State Board of Health under Chapter 104C of the general statutes of North Carolina. The Section is organized into the five following program areas to discharge these and other responsibilities:

1. Radioactive material licensing and inspection.
2. Radiation producing machine registration and inspection.
3. Environmental radiation surveillance.
4. Electronic instrumentation maintenance and calibration.
5. Radiation emergency team.

Based on an evaluation of radiation exposure to North Carolina citizens, highest priority was assigned to reducing unnecessary diagnostic medical and dental X-ray exposure. During the report period 907 inspections of medical and dental X-ray machines were performed to determine compliance with the requirements of the North Carolina Regulations for Protection Against Radiation. All facilities inspected

were brought into compliance with the Regulations. Registrants were strongly urged to implement recommendations which would further reduce radiation exposure to patient and operator.

One hundred ninety-eight other machines not used in the healing arts were also inspected and brought into compliance with the regulations. Nine hundred sixteen X-ray machines were registered during the reporting period while 56 registrations were terminated. As of June 30, 1970 there were 3682 machines registered. Improvements in the X-ray program are in part due to the development of a data processing system for registration and inspection data. A presentation made recently at a national meeting of State Radiological Health Program Directors has met with such a favorable response that our system is being considered as a model for X-ray programs in other states.

During the biennium the highest priority for the Radioactive Material Licensing Program was to reduce the frequency of industrial radiographic radiation accidents. To implement this objective a more stringent review of applications was undertaken to ensure that the users had adequate training and that operating and emergency procedures were carefully designed. In addition, the inspection frequency of these licensees was increased.

During reporting period 472 applications for new or amended licenses were comprehensively reviewed. Forty-nine new licenses were issued, 423 amendments were issued, and 19 licenses were terminated. As of June 30, 1970, there were 257 active radioactive material licenses.

One hundred sixty-eight inspections were made of licensees' facilities to determine that the requirements of the Regulations and specific license conditions were being followed. One hundred four licensees were found to be in non-compliance. When violations were found, actions were required of the licensees to ensure the safe use of radioisotopes.

In the environmental surveillance program, data is gathered to evaluate the radiation exposure to the North Carolina public from such media as food, air, water, milk and shellfish. During the reporting period, 3083 samples were submitted to the Laboratory Division for radiation analyses. Results of the data show that environmental radioactive pollution is well below levels established for protecting the public's health.

The surveillance program was initially designed for monitoring state wide fallout from nuclear detonations. Although this capability must be retained, emphasis of this program is being shifted to source



oriented surveillance for large nuclear facilities. During the biennium plans for construction of five large nuclear reactors were announced and one large reactor fuel fabricating plant went into operation.

The Section is responsible for repair and maintenance of all State Board of Health electronic equipment which includes almost 400,000 dollars worth of equipment in the Film Library, Radiological Health Section and Laboratory Division alone. During the biennium over 400 major electronic repair requests and 300 instrument calibrations were handled by the Electronics Shop staff. The efficiency of this program has been minimized. Similarly, implementation of a preventative maintenance program has significantly lowered the mean-time-to-failure for much of the State Board of Health electronic instrumentation.

The Radiation Emergency Team responded to 6 radiation incidents during the reporting period. Several potentially hazardous situations were avoided through the quick response of the team. However, the most serious incident concerned a massive radiation exposure to a worker involved with industrial radiography. The team conducted a thorough investigation of the causes of this incident. Subsequently, strong corrective actions were implemented to ensure that accidents of this type do not recur.

In addition to the routine program activities cited above, the following special projects were completed during the biennium:

1. A study of cold cathode discharge tubes in North Carolina High Schools was made to determine the radiation exposure that could result to teachers and students. The results of this study were submitted to the U. S. Public Health Service. As a result, these tubes have been redesigned by manufacturers in accordance with new Federal specifications.
2. A study of natural radiation in North Carolina Public ground water supplies was designed. As of June 30, 1970, 314 samples were collected and analyzed. It is hoped that the results of this study will be used to determine the need for a radiation standards for Radon in drinking water.
3. A study was made in conjunction with the U. S. Public Health Service to determine if antiquated X-ray equipment could be modified to meet existing regulations or if new controls were necessary. The results of this study show that new controls were not needed.

4. A study was designed to determine existing levels of Tritium in the major rivers of North Carolina. Tritium can be discharged from nuclear power reactors. Since several power reactors had been announced for construction in North Carolina, this data will serve as a bench mark.
5. A study was conducted to determine the health and safety problems associated with microwave cooking ovens. The results of this study were made available to the U. S. Public Health Service and were used in part for the development of a Federal Performance Standard for the manufacturers microwave ovens.

Section staff received 31 man-weeks of classroom training from the U. S. Public Health Service and the U. S. Atomic Energy Commission. This training was obtained to maintain and expand the staff's knowledge of radiation control. Due to the exceptional growth of the nuclear industry and the need and expanded uses of radiation, it is necessary for the Section to keep current on the health and safety aspects of these new developments. Furthermore, additional manpower has been requested to permit the Section to continue its required activities.

### **Sanitation Section**

Personnel of the Section continued work on their primary responsibility of assisting and encouraging the local health departments to conduct environmental sanitation programs consistent with the needs and capabilities of the individual counties. These programs include the enforcement of State and local laws and regulations. There is a continuing need for better planning and execution of county programs, and for better training and supervision of personnel.

In milk sanitation, routine milk sanitation program surveys were continued as in the past. With occasional exceptions, the county programs were satisfactory. However, changing patterns in the dairy industry are making it difficult for county health department sanitarians to carry out effective sanitary control of dairy farms, and there is a growing need for State Board of Health personnel to assist with farm inspection work and related work. Such percentage of market milk has been asked for in B Budget and special requests. The percentage of market milk pasteurized is more than 99.9 and only three retail raw dairies remain in the State.

In food, lodging, and institutional sanitation, the District Sanitarians, jointly with the local men, have made many inspections of

food and lodging establishments on the principal travel routes, thus promoting better enforcement and compliance with state-wide sanitation standards.

We continued to participate in the activities of the Committee on Milk and Food Protection of the Conference of State Sanitary Engineers, with particular attention being given to the National Sanitation Foundation's Joint Committee for Food Equipment Standards and also the American Merchandising Health-Industry Council of the National Automatic Merchandising Association.

As provided by an Act of the 1967 General Assembly, sanitation regulations for local confinement facilities were drafted and these were considered and adopted by the State Board of Health at a meeting in September, 1968. These regulations, and regulations adopted by the N. C. Board of Social Services (formerly N. C. Board of Public Welfare) were implemented subsequently in a cooperative inter-agency program.

After field investigations, a revised set of sanitation regulations for summer camps was drafted and reviewed with committees of local sanitarians and the camping directors' organization. The regulations are to be presented to the State Board of Health for consideration at its meeting in October, 1970.

In shellfish sanitation, new scallop sanitation regulations were implemented at the start of the 1968-1969 scallop season and adequate progress was made. Revised sanitation regulations for crabmeat (crustacea meat) were developed, including standards for pasteurization, and these will be submitted to the State Board of Health in the future. The shellfish sanitation program again received high ratings on the annual USPHS program reviews.

In late October, 1969, it was learned that certain units of the sewage treatment plant of Newport, North Carolina, had been by-passed. Special investigations of the bacteriological quality of the shellfish-growing waters of the downstream portion of the Newport River gave results which made it necessary that we request the Department of Conservation and Development to close a portion of the river to the taking of shellfish, which was done promptly, and the area was still closed at the end of the fiscal year despite prompt correction of the plant deficiencies. Assistance in disposition of shucked and shell oysters in the hands of dealers was provided by the N. C. Department of Agriculture. During subsequent weeks, no unusual incidence of infectious hepatitis was reported in the coastal section of the state. Factors involved in the pollution include: partial by-passing of the

treatment plant, run-off from livestock and poultry operations, and run-off from housing with mal-functioning or absent sewage disposal facilities. With special funds approved for this work, six man-months of extra help along with 4 man-months of supervision by a member of the staff were devoted to locating and gaining corrections of sewage disposal violations in the Newport River area.

In Migrant Labor Camp Sanitation, continuing good results were achieved in promoting compliance with the 1963 agricultural labor camp sanitation act. In 1969, the Council of State granted funds to employ nine Sanitarian Aides during three summer months to promote and teach sanitary camp operation. In 1970, similar action allowed the employment of ten men. The men were issued simple tools and instructed to cut weeds, bury garbage, etc., if the camp occupants could not be persuaded to do so.

In general sanitation activities, a District Sanitarian from another territory was assigned the responsibility for promoting the construction of a sewage collection system for the Chimney Rock community and a trunk sewer to connect to the Lake Lure system. As the result of numerous meetings and conferences he held with personnel of the District Health Department and leaders of the Chimney Rock and Lake Lure communities, it is expected that the long-needed facilities will be provided with assistance from Federal agency grants.

In education and training activities, the NCDC home-study course 3010-G, Community Hygiene (formerly called Environmental Sanitation) was adopted and used as the principal basic in-service education program for newly-employed local sanitarians. Several District Sanitarians conducted one-day seminars on current problems for the local men in their districts. Foodhandler training schools were conducted in several places in cooperation with the local health departments.

In activities relating to administration, a number of new Sanitarian Supervisor positions were established in local health departments. These positions are classified at three levels and their establishment reflects interest and concern for effective supervision of local programs. During the biennium, only one usage of the administrative warrant procedure was reported; this was employed by a District Sanitarian in the enforcement of the State statute regarding disposal of sewage from private residences.

#### **Solid Waste and Vector Control Section**

During this biennium, the former Insect and Rodent Control Section

changed the name to the Solid Waste Vector Control Section as this more clearly defined the activities of this section.

This Section is responsible for the administration of three programs and carrying out the diverse activities that are included in their objectives. The Solid Waste and Vector Control Program involves the training of local personnel, assisting local health departments and municipalities with problems involving arthropods and rodents, municipal and rural refuse handling, promotion and helping with the environmental sanitation surveys, enforcing impounding water regulations, investigating complaints, and assisting with problems involving private water supplies and excreta disposal. The Salt Marsh Mosquito Control Program consists of assistance to local health departments, municipalities, and mosquito control districts in planning, supervising, operating, and promoting salt marsh drainage and dyking projects, and in the disbursement of funds provided by the Legislature for assistance to local communities engaged in mosquito control. The Bedding Sanitation Program consists of inspections of bedding manufacturing plants, sanitizers, and retail establishments to assure that the bedding made or sold in North Carolina compiles with the requirements of good sanitation.

This Section has for many years been active in the field of solid waste disposal but during this biennium, an increased interest was created by the enactment of legislation that established it as the agency responsible for a State program. Following the enactment of this legislation, additional interest was created on the county level for satisfactory programs for the disposal of solid waste. Accordingly, the personnel of this Section has devoted considerable time to working with county and municipal officials in the planning of an effective program that would be beneficial to both groups. There have been 27 counties in which complete solid waste disposal facilities have been prepared and in four of these counties, the program has already been implemented with much success.

The Salt Marsh Mosquito Control Program continues to be one of the major activities of this Section. During the biennium a total of \$835,172 of State funds has been allocated to 52 projects involved in both municipalities and counties. These funds were matched by local assets in the amount of \$1,048,879. Participating in this program were 31 health departments, 20 municipalities, and one mosquito control district. There were 13 draglines working on drainage and dyking during the biennium and during this period constructed 211 miles of ditches, cleaned 73 miles of ditches, and constructed 22 miles of dykes that created 2,584 acres of salt marsh impoundments. These impound-

ments provide excellent salt marsh mosquito control in addition to providing rest areas for migratory waterfowl. Our staff assisted local personnel by giving consultation, exploring salt marshes to determine where canals and dykes should be constructed, setting construction stakes, making entomological investigations, and checking on completed work. This involved the exploration of 41,101 acres of marsh land. The usual assistance was provided to local health departments, municipalities, and owners of hydro-electric lakes and other responsible agencies in the development, evaluation, and supervision of mosquito control activities. Fifty-seven permits were issued to impound water. Twenty hydro-electric developments are located in North Carolina and are required by the Federal Power Commission to control mosquitoes in a manner consistent with existing laws. Close liaison is maintained with the U. S. Corps of Engineers, the State Highway Commission, the U. S. Soil Conservation Service, and other agencies whose operations create topographical change in order to prevent the creation of conditions favorable to the propagation of mosquitoes and other disease vectors.

Personnel of this Section devoted additional time assisting local health departments and municipalities in the establishment of effective rodent control programs. Special assistance was provided to the City of Charlotte in the preparation of a Federal Grant request and in the making of base-line surveys to establish an effective rodent control program.

The staff continued to provide consultation service to the local health departments with other facets of vector control that had public health significance. The increase in the number of cases of Rocky Mountain Spotted Fever was noted in several areas of the State and routine surveys were made to determine an effective means for the control of the tick that transmits this disease. It is anticipated that if the increase of Rocky Mountain Spotted Fever continues as it has over the past biennium, it will be necessary that additional studies and programs for the control of this tick be made.

















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